



محافضة القاهرة

# **SOUTHERN ZONE CONTRACT MONITORING PLAN FOR THE CONTRACT MONITORING UNIT**

## **GOVERNORATE OF CAIRO**

### **Prepared for:**

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## **SECTION 1 GENERAL INFORMATION**

### **INTRODUCTION**

The Governorate of Cairo (GOC) is entering into Contracts with private sector companies to provide solid waste, public facility cleaning, and medical waste management services. In order to better manage the performance of the contractors and to provide competition for the contracts, the GOC was divided into four zones (i.e., Northern, Eastern, Western, and Southern).

The GOC developed the Tender Documents for the Northern, Eastern, and Western Zones. The Egyptian Environmental Policy Program, Solid Waste Technical Assistance Project through funding from the United States Agency for International Development provided technical assistance for the development of the Southern Zone Tender Documents.

The Southern Zone Tender Documents form the basis for information contained in this Contract Monitoring Plan (CMP). This plan, as presented, will need to be modified for use in the Northern, Eastern, and Western Zones based on contract specific information for each zone.

The GOC is responsible for monitoring the contract performance of the waste management Contractors. For this reason, the GOC has created a new monitoring unit within the Cairo Cleansing and Beautification Authority (CCBA) to provide monitoring services. This newly created unit will be referred to as the Contract Monitoring Unit (CMU) in this document.

### **CONTRACT MONITORING UNIT ACTIVITIES**

The activities conducted by the CMU will include four primary categories. The four primary categories are listed below and further defined.

- Contract Performance Monitoring
  - Train field monitors and administrative staff.
  - Measure Contractor's performance and compliance with the terms and conditions of the Contract.
  - Resolve disputes between the Contractor and the GOC.
- Contractor Payment
  - Identify violations of contract conditions and calculate appropriate penalties.
  - Review and adjust invoices and coordinate payment.

- Public Awareness and Communication
  - Develop and administer a public awareness and communication program.
  - Monitor public compliance with solid waste management rules and regulations.
  - Develop and implement a public awareness and communication strategy directed toward modifying public behavior and instructing the public in the use of the new solid waste management system.
  - Coordinate with and evaluate the Contractor's public information service compliance to the terms of the Contract.
  - Evaluate public awareness and compliance programs.
- Legal Assistance
  - Facilitate transfer of GOC facilities and land to the Contractor.
  - Assist the Contractor in obtaining permits, governmental approvals, and licenses.
  - Represent the GOC during dispute resolution or arbitration procedures..

## **PURPOSE AND STRUCTURE OF THIS DOCUMENT**

This CMP for the Southern Zone provides detailed guidance on how to perform the described activities. The plan includes a description of the entire CMU and each of the field monitoring activities.

The CMP does not address administration and organizational support activities. The organizational structure, roles and responsibilities, job descriptions, and staffing levels for the CMU are described in a document entitled "Management Structure for the Contract Monitoring Unit - Governorate of Cairo".

The CMP is based on the Southern Zone Request for Tenders (RFT), which is different from the conditions and specifications for the other three zones. The GOC should develop additional contract monitoring plans for the Northern, Eastern, and Western Zones based on this CMP and the contract requirements specific to those particular contracts.

## **BASIS FOR CONTRACT MONITORING UNIT ACTIVITIES**

The Contract General Conditions (GC) provides the contractual authority for the activities performed by the CMU. Specific and relevant contract terms and conditions included in the GC include the following:

- Right to Monitor Services – In the Articles and Appendices for each Service, the Performance Monitoring provisions state that the GOC will assign Project Monitors to observe and evaluate the Contractor’s compliance with the Performance Standards.
- Access to facilities (GC 3.4.2) – The GOC has access to the Contractor’s facilities at all time.
- Performance Standards (GC 2.1.3) – The Contractor is obligated to perform services that meet the Performance Standards. If the Contractor fails to meet the Standards, the GOC may apply penalties.
- Failure to Provide Service (GC 2.1.2) – If the Contractor fails to provide a Service, the GOC may issue an instruction requiring the Contractor to provide the Service properly. GC 2.1.2 further states that the GOC is authorized to remedy any failure to provide service and deduct the cost of the remedy from the payments due the Contractor.
- Settlement of Disputes (GC 1.6) – The GOC and Contractor are obligated to settle disputes. General Conditions Section 1.6 states that they will seek to resolve dispute or difference by mutual consultation. Dispute settlement may include negotiations or formal arbitration

## **CONTRACT MONITOR UNIT INDEPENDENCE AND ACCOUNTABILITY**

A long-term Contract requires a good working relationship between the Contractor and the GOC. Independence and accountability of GOC Monitors cannot be compromised.

The GOC will make it clear to the Contractor that the CMU staff shall not be improperly influenced by the Contractor and shall avoid any contact or action that creates a real or perceived conflict of interest between the staff member and the Contractor. The CMU staff must continuously guard against a gradual diminishing of their independence and objectivity in their relationship with the Contractor.

Rules governing the interaction between the Contractor and the CMU should be formally established before monitoring activities start. The policies should be thoroughly explained to both the Contractor and the CMU staff. This explanation should include specific examples of unacceptable behavior. CMU staff should establish and maintain open, honest, and businesslike relationships with the Contractor.



## **SECTION 2 DISTRICT OFFICES**

### **DISTRICT MANAGER**

District Managers must be very familiar with the Contractor's Final Work Plans for Residential and Commercial Collection, Streets and Public Facility Cleaning, Industrial Waste Collection, Medical Waste Collection, and Public Information in their District. They must also have a thorough understanding of the Service Specifications and Minimum Technical Requirements for each service.

#### **Daily Management of District Staff**

District Managers will manage and organize the District staff in a way to ensure that each person has the resources, knowledge, and management support needed to perform their many duties. The District Manager must establish a management organization that consistently provides daily work assignments, supplies, equipment, personnel and labor policies, health and safety guidance, etc. to insure the efficient utilization and management of the staff.

#### **Arrange for Training and Technical Guidance to District Staff**

District Managers will obtain training and technical guidance from the Zone-level Technical Departments for the Data Specialists, District Monitors and Public Awareness and Communication (PAC) Coordinators. District Managers will receive training in solid waste management and public facility cleaning, Service Specifications and Technical Requirements, and specific activities performed by the Data Specialists, Monitors, and PAC Coordinators. They must ensure that all District personnel are highly trained and capable of performing their assigned jobs.

The Data Specialists, Monitors, and PAC Coordinators will bring their questions to the District Manager, who will render a decision in cases where policies or procedures already exist. However, if a question involves any interpretation of the Service Specifications or Technical Requirements, the District Manager will withhold advice and forward the question to the appropriate Zone-level Technical Department.

#### **Communicate with District Chairman**

The District Manager will meet at least weekly with the local District Chairman to report on the Contractor services and to discuss local concerns. The District Chairman will be a source of information from the political perspective. This, in combination with the Monitors' observations and the work of the PAC Coordinators, will provide the District Manager a thorough understanding of customers opinions of the Contractor performance.

#### **Process Reports**

The District Manager shall be responsible for the final review and approval of all reports generated by the District Office. During the Preparation Period, the District Manager will

review Roll-out Cart and Bin Distribution Reports and send approved reports to the Collection and Cleaning Department and the Operations Management Department. During the Operations Period, The District Managers will review Daily Monitoring Reports for each service on a regular basis.

District Managers will send final reports to the appropriate Zone Technical Department (Collection and Cleaning or Medical and Industrial) and the Zone Operations Management Department. They will also send the summary pages of the Reports to the District Chairman on a weekly basis.

District Managers will review Monthly Accumulated Waste Reports and send final reports to the Cairo Cleansing and Beautification Authority, the Operations Management Department, and the District Chairman.

### **Attend Zone-Level Meetings**

District Managers may be required to attend Zone-level meetings if requested by the Zone Director. These may include meetings with the Contractor to discuss service issues, training courses, and Zone-wide management meetings where District Managers report on the overall status of solid waste services in their Districts.

## **DATA SPECIALISTS**

The Data Specialists must have a thorough understanding of the Service Specifications and Minimum Technical Requirements for Residential and Commercial Collection, Streets and Public Facility Cleaning, Industrial Waste Collection, and Medical Waste Collection. The Data Specialists must know and understand all aspects of the Contractor's Final Work Plans for these same services.

### **Handle Customer Complaints**

The Data Specialists will receive complaints from Customers calling the office and from Monitors who radio in complaints received directly from customers. They will record information regarding each complaint (location, time and date, and description of the complaint) and give this information immediately by telephone to the Contractor's Customer Service Office. In addition, Data Specialists and Monitors will provide the Contractor's Customer Service telephone number to any complainant and ask him/her to call the Contractor directly in the future.

### **Receive Non-Collection Notices from Contractor**

The Contractor is required by Contract to contact the GOC each day and provide a list of the locations and nature of any Non-Collection Notices left by the Contractor. The Data Specialists will give the list of Non-Collection Notices to the PAC Coordinators.

### **Compile Inspection Forms and Produce Monitoring Reports**

Data Specialists will receive the Collection and Cleaning Daily Inspection Forms. They will enter information contained on the forms into an electronic database and then generate a

Daily Monitoring Report for each service. The objective is to summarize, for example, the street cleaning Violations from all District Monitors into a single Daily Street Cleaning Monitoring Report for the entire District. The Daily Monitoring Report will also include information about all complaints for each service. The Data Specialists will submit the Daily Monitoring Reports for each service to the District Manager.

### **Accumulated Waste Deposits**

Data Specialists will receive and compile information about the location and status of Accumulated Waste sites. They will generate a Monthly Accumulated Waste Report for the District Manager that lists the location and status of accumulated waste deposits.

### **Container Distribution, Repair, and Replacement**

During the Preparation Period, Data Specialists will receive Container Distribution Forms listing where Rollout Carts, Bins, Litter Baskets, Medical Waste Containers, and Industrial Waste Bins are missing. They will compile the forms, generate a Container Distribution Report, and submit it to the District Manager.

During the Operations Period, the Data Specialist will receive Container Repair/Replacement Forms that list containers that are damaged or in need of repair or replacement. The Data Specialist will compile the forms, generate a Container Repair/Replacement Report, and fax it to the Contractor's Customer Service Office.

## **COLLECTION AND CLEANING MONITORS**

Collection and Cleaning Monitors will work in their assigned areas every day. Each Monitor will be assigned to a specific geographic area of the District. Each Monitor's assigned area will be subdivided into three areas that he/she will inspect twice each week (working six days per week). The Monitors will thoroughly inspect a sample of the streets in each sub-area twice each week. They will inspect different streets each time, so that every street is inspected over time. Monitors will plan their daily inspection route to ensure that they are inspecting the street after the Contractor has completed providing the services for that day.

The Collection and Cleaning Monitors must know all of the Service Specifications and Minimum Technical Requirements for Residential and Commercial Collection and Streets and Public Facility Cleaning in their District. They must be familiar with all aspects of the Contractor's Final Work Plans for these same services.

Appendix A provides a detailed description of procedures to be followed by the Collection and Cleaning Monitors. Following is a list of the Monitors' duties:

- Inspect Residential and Commercial Collection services:
  - Dwelling-to-Dwelling Collection
  - Building-to-Building Collection
  - Waste Pooling Site Collection
  - Large Commercial Generator Collection

- Inspect Public Facility Cleaning services:
  - Street Sweeping
  - Litter Collection
  - Litter Baskets
  - Public Structure Washing
- Monitor distribution and condition of Roll-out Carts, Bins, and Litter Baskets.
- Monitor manner of service and Contractor's personnel.
- Record and follow-up on Possible Violations issues.
- Complete and submit daily forms:
  - Collection and Cleaning Daily Inspection Form
  - Roll-out Cart and Bin Distribution Form
  - Roll-out Cart and Bin Repair/Replacement Form
- Assist Customers with Complaints.
- Provide Public Outreach.
- Identify and Report Accumulated Waste deposits.

## **MEDICAL AND INDUSTRIAL WASTE COLLECTION MONITORS**

The Medical and Industrial Waste Collection Monitors will inspect their assigned areas everyday. The Monitors will be assigned a number of industrial and medical facilities in their District. Each Monitor's assignment will be divided into six day-routes that he/she will inspect once a week (working six days per week). The Monitors will visit each facility on their day-route following a prescribed path. Monitors will design their daily inspection route to ensure that they are inspecting facilities after the time the Contractor has provided services for that day.

Some Monitors may be equipped with motorized scooters or bicycles to enable them to travel more quickly between facilities. The Medical and Industrial Waste Collection Monitors must know all requirements of the Contractor's Final Work Plans for Industrial Waste Collection and Medical Waste Collection. They must also know all requirements of the Service Specifications and Minimum Technical Requirements.

Appendix B provides a description of procedures to be followed by the Medical and Industrial Waste Collection Monitors. Following is a list of some of the Monitors' activities:

- Inspect Industrial Waste Collection services.
- Monitor distribution and condition of Industrial Waste Bins.
- Monitor Medical Waste Collection services.
- Monitor distribution and condition of Medical Waste Containers.
- Monitor manner of service and Contractor's personnel.
- Record and follow-up on Possible Violations issues.
- Complete and submit daily forms:
  - Medical and Industrial Daily Inspection Form
  - Container and Bin Distribution Form
  - Container and Bin Repair/Replacement Form.
- Assist Customers with Complaints.
- Provide Public Outreach.

Appendix B provides a detailed description of procedures to be followed by the Medical and Industrial Waste Collection Monitors

## **PUBLIC AWARENESS AND COMMUNICATION COORDINATOR**

### **Provide Information and Assistance to District Monitors**

The PAC Coordinators will serve as a resource for the District Monitors for communicating with the public. They will provide the Monitors with printed materials for distribution to the public.

The PAC Coordinators will provide advice on how to interact with the public and will help solve specific problems that the Monitors encounter. They may accompany the Monitors on their day-routes to assist with PAC activities and to observe firsthand problems encountered by the Monitors.

### **Conduct Public Awareness Programs**

The PAC Coordinators will undertake many activities to enhance public awareness in the District. These may include:

- Making presentations at institutions and organizations.
- Organizing public awareness events.
- Promoting the solid waste programs at public events.
- Coordinating distribution of PAC materials in the District.

Appendix D provides a detailed description of procedures to be followed by the PAC Coordinators.

### **Follow Up on Non-Collection Notices**

The Contractor is required to notify the GOC of any Non-Collection Notices it has placed. The Data Specialists will pass this information to the PAC Coordinators, who will utilize this information as an indication of whether GOC and Contractor public information campaigns are being successful.

### **SECTION 3**

#### **ZONE – COLLECTION AND CLEANING DEPARTMENT**

##### **CHIEF ENGINEER-COLLECTION AND CLEANING**

The Chief Engineer-Collection and Cleaning is the highest-ranking technical staff person in the CMU for Residential and Commercial Collection and Street and Public Facility Cleaning Services. He/she must be completely knowledgeable of all the Service Specifications, Minimum Technical Requirements, Performance Standards, and Performance Monitoring provisions in the Contract. The Chief Engineer – Collection and Cleaning must also fully understand the Contractor's Final Work Plans and the General Conditions of the Contract.

He/she must have this knowledge in order to be the final authority and technical resource for the Department's staff regarding interpretation of the Contract and assessment of the Contractor compliance with the requirements of the Contract. He/she will also rely on this knowledge during interactions with the Zone Director, Compliance and Penalties Department, and the Contractor.

##### **Advise the Zone Director**

The Chief Engineer-Collection and Cleaning will be responsible for all Department interactions with the Zone Director. He/she will be the Zone Director's designated collection and cleaning expert.

Questions may arise that require interpretation of the requirements of the Contract and Work Plans. For example, the Contractor may propose changes in the technical design contained in his Final Work Plan (i.e., means and methods of performing the work). These may include changes in the type of collection vehicles and containers used or the location of containers, or the number and organization of personnel. Also, new Customers may be added to the Contract during the Operations Period. It will be necessary to determine the number and type of new Customers and to decide what type of service the Contractor will provide to them.

The Chief Engineer-Collection and Cleaning will review, assess, and advise the Zone Director on these issues. He/she may utilize the Engineers and Compliance Analysts for Collection and Cleaning to perform research and analysis support work.

##### **Interpret Specifications**

The Chief Engineer-Collection and Cleaning will be responsible for all technical interpretations and clarifications. He/she will provide interpretations and clarifications of the Service Specifications, Minimum Technical Requirements, Performance Standards, and Performance Monitoring to the Compliance Analysts and Engineers for Collection and Cleaning.

## **Contractor Compliance**

The Chief Engineer-Collection and Cleaning must be consistent and fair in the interpretation of the technical requirements of the Contract. The Chief Engineer-Collection and Cleaning will review all Weekly Compliance Reports and send approved reports to the Compliance Analyst-Compliance and Penalties and the Operations Management Department.

The Chief Engineer-Collection and Cleaning will attend all meetings with the Contractor dealing with collection and cleaning services. The Chief Engineer-Collection and Cleaning will provide technical support for solving problems regarding the Contractor's services. For example, he/she may suggest solutions for correcting Service Failures or providing clarifications of the Minimum Technical Requirements of the Contract.

## **Develop Templates for Collection and Cleaning Forms and Reports**

The Chief Engineer-Collection and Cleaning will develop the templates for all forms and reports utilized by the Collection and Cleaning Department and the District Offices for monitoring Residential and Commercial waste collection, street sweeping, and public facility cleaning. He/she may use the Engineers and Compliance Analysts for Collection and Cleaning to assist in the development of the forms and reports. Samples are provided in Appendix E.

## **Training and Technical Assistance for District Offices**

The Chief Engineer-Collection and Cleaning will oversee the training and technical assistance provided to District Data Specialists and Collection and Cleaning Monitors. The Chief Engineer-Collection and Cleaning will ensure that the content and delivery of training to District Monitors will adequately prepare them for their duties and responsibilities. He/she will have final review and approval authority for the training material.

Throughout the term of the Contract, the Department will provide technical assistance and ongoing training to the District Data Specialists and Monitors. This service will be primarily provided by staff however, the Chief Engineer-Collection and Cleaning will be responsible for the quality and content of the assistance provided.

## **External Relations**

The Chief Engineer-Collection and Cleaning may be called upon to provide testimony at legal, legislative, and regulatory hearings. His/her scope of engagement in these activities will be limited to technical aspects of the collection and cleaning services. The Chief Engineer-Collection and Cleaning may also be invited to make technical presentations at conferences.

## **COMPLIANCE ANALYST-COLLECTION AND CLEANING**

Each Compliance Analyst will keep a copy of Articles 1 and 4 covering the Residential and Commercial Collection and Streets and Public Facility Cleaning Services and the



Contractor's Final Work Plans. They shall be fully knowledgeable of all of the requirements stated in the Service Specifications, Technical Requirements, Performance Standards, and Performance Monitoring provisions specified in the Contract.

### **Review Final Work Plan and Produce Compliance Report**

The Compliance Analysts-Collection and Cleaning will receive the Contractor's Final Work Plans for Residential and Commercial Collection and Streets and Public Facility Cleaning Services. They will create a checklist of all the elements that are required by the technical specifications and confirm whether they are addressed in the Final Work Plans. They will also evaluate whether the Final Work Plans include a description of how the Contractor will comply with each Service Specification and Technical Requirement.

The Compliance Analysts-Collection and Cleaning will enumerate each Contract Non-compliance; produce a Final Work Plan Compliance Report; and submit it to the Chief Engineer-Collection and Cleaning for final review and approval. The Analysts will utilize the Engineers-Collection and Cleaning to assist them in this work.

### **Review Reports and Produce Compliance Reports**

During the Preparation Period, the Compliance Analysts-Collection and Cleaning will receive the following Contractor documents:

- Monthly Preparation Reports.
- Route Maps and Schedules.

The Analysts will create a checklist of all required elements and determine if they are present. They will identify each Contract Non-compliance item; produce a Contractor Reporting Compliance Report; and submit it to the Chief Engineer-Collection and Cleaning. The Analysts will utilize the Engineers-Collection and Cleaning to assist them in this work.

The Compliance Analysts-Collection and Cleaning will receive the following Contractor reports during the Operations Period:

- Monthly Operations Reports.
- Annual Operations Reports.
- Annual Training Reports.

The Analysts will review them to measure compliance with the Performance Standards. They will create a checklist of all required elements and confirm whether they are present in the reports.

The Compliance Analysts-Collection and Cleaning will enumerate each Contract Non-compliance; produce a Contractor Reporting Compliance Report; and submit it to the Chief

Engineer-Collection and Cleaning. The Analysts will utilize the Engineers-Collection and Cleaning to assist them in this work.

#### **Review Collection Vehicle Fleet List**

Prior to commencement of service, and annually throughout the Contract, the Contractor is required to submit a list of equipment to be used (Collection Vehicle Fleet Inventory). The Contractor is also required to notify the GOC of changes in the Fleet within 24 hours of such change. The Compliance Analysts-Collection and Cleaning will receive the list as well as any change notifications and determine whether the equipment is essentially the same as that specified in the Final Work Plan. The Analysts will utilize the Engineers-Collection and Cleaning to assist them in this work.

#### **Assist in Development of District Inspection Form and Monitoring Report**

The Chief Engineer-Collection and Cleaning may request the technical assistance of the Compliance Analysts-Collection and Cleaning in development of the Inspection Forms and Monitoring Report format that will be used by the District Offices. The Analysts will perform work as directed by the Chief Engineer-Collection and Cleaning.

#### **Assist in Training District Personnel**

The Compliance Analysts-Collection and Cleaning will have primary responsibility for training District Data Specialists in how to compile and report inspection results in the Daily Monitoring Report database. They may also assist the Chief Engineer-Collection and Cleaning in training the District Monitors.

#### **Compile Monitoring Reports and Produce Weekly Compliance Reports**

The Compliance Analysts-Collection and Cleaning will receive the District Monitoring Reports. The Analysts will compile these Reports to measure compliance with the Performance Standards. This work will entail adding together the Violations reported by each District; calculating the Contractor's level of performance; and comparing it to the Performance Standards. The Analysts may utilize the Engineers-Collection and Cleaning to assist them in this work.

With regard to Customer complaints, the Analysts will compare the list of complaints reported by the Districts against the Contractor's Complaint Record submitted with the Monthly Operation Report. The Analysts will determine whether the Contractor has properly reported all the complaints and then compare this against the Performance Standards.

When the Contractor's fails to meet the Performance Standard, the Compliance Analysts-Collection and Cleaning will record it as a Contract-Noncompliance. The Analysts will produce a Weekly Compliance Report that lists all the Contract Non-compliances determined during that week. They will send it to the Chief Engineer-Collection and Cleaning.

### **ENGINEER-COLLECTION AND CLEANING**

Each of the Engineers-Collection and Cleaning will keep a copy of Articles 1 and 4 and the Final Work Plans covering the Collection and Cleaning Services. They will be intimately familiar with all the Service Specifications and Technical Requirements and the Contractor's Final Work Plans.

#### **Assist Compliance Analysts-Collection and Cleaning**

The Engineers-Collection and Cleaning will provide technical support to the Compliance Analysts-Collection and Cleaning as needed. This will include support for evaluation of reports submitted by the Contractor.

The Engineers-Collection and Cleaning will also provide technical support to the Compliance Analysts-Collection and Cleaning for compiling District Monitoring Reports; calculating Contract compliance; and preparing Compliance Reports.

#### **Assist in Interpretation of Specifications**

The Chief Engineer-Collection and Cleaning may request the technical assistance of the Engineers-Collection and Cleaning in interpreting the Service Specifications and the Technical Requirements. The Engineers-Collection and Cleaning will perform work as directed by the Chief Engineer-Collection and Cleaning.

#### **Assist in Development of District Inspection Forms**

The Chief Engineer-Collection and Cleaning may request the technical assistance of the Engineers in development of the Inspection Forms that will be used by the District Monitors. The Engineers-Collection and Cleaning will perform work as directed by the Chief Engineer-Collection and Cleaning.

#### **Train District Monitors**

The Engineers-Collection and Cleaning will have primary responsibility for training the District Collection and Cleaning Monitors. They will have been trained in solid waste management, street sweeping, and public facility cleaning; the Service Specifications and Technical Requirements; and the specific activities to be performed by the Monitors. They may request the assistance of the Compliance Analysts-Collection and Cleaning in developing training materials and delivering the training.

The initial Monitor training will occur during the Preparation Period. Based on the Contractor's Final Work Plans and the knowledge gained through their own training, the Engineers-Collection and Cleaning will develop the training materials. The Monitor training will concentrate on teaching the Monitors the Service Specifications and Technical Requirements and the Contractor's work plan, followed by in-the-field training on actual monitoring procedures.

There will be periodic refresher training courses for all Monitors as well as initial training for newly hired Monitors. The objective of the refresher courses will be to update the Monitors on changes in the Contractor's service and interpretation of the Contract requirements.

**Provide Technical Assistance to District Offices**

The Engineers-Collection and Cleaning will serve as a technical resource for the District Managers who may contact them with day-to-day questions regarding field-monitoring procedures.

**Provide Service Quality Control and Consistency**

The Engineers-Collection and Cleaning will regularly spend time in the field with District Monitors to observe their monitoring practices. The purpose of this work is to ensure that monitoring activities are consistent across all Districts and adhere to the procedures communicated in the training.

## **SECTION 4**

### **ZONE – MEDICAL AND INDUSTRIAL DEPARTMENT**

#### **CHIEF ENGINEER-MEDICAL AND INDUSTRIAL**

The Chief Engineer-Medical and Industrial is the highest ranked technical staff person in the CMU for Infectious Medical Waste and Industrial Waste Collection Services (the Department does not cover medical waste treatment facilities; they are monitored by the Fixed Facility Department). The Chief Engineer-Medical and Industrial must be intimately familiar with all collection-related Service Specifications, Minimum Technical Requirements, Performance Standards, and Performance Monitoring provisions in Appendix 2, Article 6 and Appendix 3 that relate to collection services.

The Chief Engineer-Medical and Industrial must also carefully study the Contractor's Final Work Plans and the General Conditions of the Contract. He/she will require this knowledge in order to act as the final authority and technical resource for the Department's staff regarding interpretation of the Contract and determination of Contractor compliance. He/she will also rely on this knowledge during interactions with the Zone Director, Compliance and Penalties Department, and the Contractor.

#### **Advise the Zone Director**

The Chief Engineer-Medical and Industrial will be responsible for all Department interactions with the Zone Director. He/she will serve as the Zone Director's Medical and Industrial Waste collection expert.

During meetings and negotiations with the Contractor, issues may arise which require interpretation of the Contract and Work Plans. During the Operations Period, the Contractor may propose changes in the technical design contained in the Final Work Plan. These may include changes in the types of collection vehicles and containers, the location of containers, or the number and organization of personnel. Also, during the Contract, new customers may be added. It will be necessary to determine the number and type of new customers and to decide what type of service the Contractor will provide.

The Chief Engineer-Medical and Industrial will review, assess, and advise the Zone Director on these issues. He/she may utilize the Department staff to perform research and analysis support work in this regard.

#### **Interpret Specifications**

The Chief Engineer-Medical and Industrial will be responsible for all technical interpretations and clarifications. He/she will provide interpretations and clarifications of the Service Specifications, Minimum Technical Requirements, Performance Standards, and Performance Monitoring to the Department staff.

### **Contractor Compliance**

The Chief Engineer-Medical and Industrial will ensure consistency and fairness in all compliance determinations. The Chief Engineer-Medical and Industrial will review Compliance Reports and send approved reports to the Compliance Analyst-Compliance and Penalties Department and the Operations Management Department.

The Chief Engineer-Medical and Industrial will attend all meetings with the Contractor that deal with Industrial and Medical Waste Collection. The Chief Engineer-Medical and Industrial will provide technical support for solving problems regarding the Contractor's services and identifying mutually agreeable remedies.

### **Develop Templates for Medical and Industrial Waste Collection Forms and Reports**

The Chief Engineer-Medical and Industrial will develop the templates for all forms and reports utilized by the Medical and Industrial Department and the District Offices to monitor Medical and Industrial waste collection. He/she may use the Engineers and Compliance Analysts for Medical and Industrial to assist in the development of the Forms. Sample forms are provided in Appendix F to this document.

### **Training and Technical Assistance to District Offices**

The Chief Engineer-Medical and Industrial will oversee the training and technical assistance provided to District Data Specialists and Medical and Industrial Monitors. The Chief Engineer-Medical and Industrial will ensure that the content and delivery of training to Medical and Industrial Monitors will prepare them fully for their duties and responsibilities. He/she will have final review and approval authority for the training material.

Throughout the term of the Contract, the Department will provide technical assistance to the Data Specialists and Monitors. While this service may be provided primarily by other Department staff, the Chief Engineer-Medical and Industrial will be responsible for the quality and content of the assistance provided.

### **External Relations**

The Chief Engineer-Medical and Industrial may be called upon to provide testimony at legal, legislative, and regulatory hearings. His/her scope of engagement in these activities will be limited to technical aspects of the collection and cleaning services.

The Chief Engineer-Medical and Industrial may also be invited to make technical presentations at conferences. Any such engagement must be approved by the Zone Director.

## **COMPLIANCE ANALYST-MEDICAL AND INDUSTRIAL**

Each Compliance Analyst will keep a copy of Appendix 2, Article 6 and Appendix 3 covering the Industrial and Medical Waste Collection Services. They will need to thoroughly understand the Service Specifications, Minimum Technical Requirements, Performance Standards, and Performance Monitoring provisions as they apply to collection services.

### **Review Final Work Plan and Produce Compliance Report**

The Compliance Analysts-Medical and Industrial will receive and review the Contractor's Final Work Plans for Industrial Waste Collection and Infectious Medical Waste Management Services. They will create a checklist of all the elements that are required and confirm whether they are present in the Final Work Plans. They will also evaluate whether the Final Work Plans provide a detailed description of how the Contractor will comply with each Service Specification and Technical Requirement.

The Compliance Analysts-Medical and Industrial will enumerate each Contract Non-compliance; produce a Final Work Plan Compliance Report; and submit it to the Chief Engineer-Medical and Industrial for final review and approval. The Analysts may utilize the Engineers-Medical and Industrial to assist them in this work.

### **Review Reports and Produce Compliance Reports**

During the Preparation Period, the Compliance Analysts-Medical and Industrial will receive the following Contractor reports:

- Monthly Preparation Reports.
- Route Maps and Schedules.

The Analysts will create a checklist of all required elements and determine if they are present. They will enumerate each Contract Non-compliance; produce a Contractor Reporting Compliance Report; and submit it to the Chief Engineer-Medical and Industrial. The Analysts may utilize the Engineers-Medical and Industrial to assist them in this work.

The Compliance Analysts-Medical and Industrial will receive the following Contractor reports during the Operations Period:

- Monthly Operations Reports.
- Annual Operations Reports.
- Annual Training Reports.

The Analysts will review them to measure compliance with the Performance Standards. They will create a checklist of all required elements and confirm whether they are present in the reports.

The Compliance Analysts-Medical and Industrial will list each Contract Non-compliance; produce a Contractor Reporting Compliance Report; and submit it to the Chief Engineer-Medical and Industrial. The Analysts may utilize the Engineers-Medical and Industrial to assist them in this work.

### **Review Collection/Transport Fleet List**

Prior to commencement of service and annually throughout the Contract, the Contractor is required to submit a list of equipment to be used (Collection/Transport Fleet). The Contractor is also required to notify the GOC of changes in the Fleet within 24 hours of such change. The Compliance Analysts-Collection and Cleaning will receive the list as well as any change notifications and determine whether the equipment is essentially the same as that

specified in the Final Work Plan. The Analysts may utilize the Engineers-Collection and Cleaning to assist them in this work.

### **Assist in Development of District Inspection Forms and Daily Monitoring Report**

The Chief Engineer-Medical and Industrial may request the technical assistance of the Compliance Analysts-Medical and Industrial in development of the Medical and Industrial Daily Inspection Forms and Monitoring reports that will be used by the District Offices. The Analysts will perform work as directed by the Chief Engineer-Medical and Industrial.

### **Assist in Training District Personnel**

The Compliance Analysts-Collection and Cleaning will have primary responsibility for training District Data Specialists in how to compile and report inspection results in the Daily Monitoring Report database. The Compliance Analysts-Medical and Industrial may be called upon by the Chief Engineer-Medical and Industrial to assist in training the District Monitors.

### **Compile Monitoring Forms and Produce Weekly Compliance Reports**

The Compliance Analysts-Medical and Industrial will receive the District Monitoring Reports. The Analysts will compile these Reports to measure compliance with the Performance Standards. This work will entail adding together the Violations reported by each District; calculating the Contractor's level of performance; and comparing it to the Performance Standards. The Analysts may utilize the Engineers-Medical and Industrial to assist them in this work.

With regard to Customer complaints, the Analysts will compare the list of complaints reported by the Districts against the Contractor's Complaint Record submitted with the Monthly Operation Report. The Analysts will determine whether the Contractor has properly reported all the complaints and then compare this against the Performance Standards.

When the Contractor fails to meet the Performance Standard, the Compliance Analysts-Medical and Industrial will record it as a Contract Non-compliance. The Analysts will produce a Weekly Compliance Report that lists all the Contract Non-compliances. They will send it to the Chief Engineer-Medical and Industrial.

## **ENGINEER-MEDICAL AND INDUSTRIAL**

Each of the Engineers-Medical and Industrial will keep a copy of Appendix 2, Article 6 and Appendix 3 covering the Industrial and Medical Waste Collection Services. They will need to know all the Service Specifications and Technical Requirements. They must also carefully study the Contractor's Final Work Plans.



### **Assist Compliance Analysts-Medical and Industrial**

The Engineers-Medical and Industrial will provide technical support to the Compliance Analysts-Medical and Industrial as needed. This will include support for evaluation of reports submitted by the Contractor.

The Engineers-Medical and Industrial will also provide technical support to the Compliance Analysts-Medical and Industrial for compiling District Monitoring Reports; calculating Contract compliance; and preparing Compliance Reports.

### **Assist in Interpretation of Specifications**

The Chief Engineer-Medical and Industrial may request the technical assistance of the Engineers-Medical and Industrial in interpreting the Service Specifications and the Technical Requirements. The Engineers-Medical and Industrial will perform work as directed by the Chief Engineer-Medical and Industrial.

### **Assist in Development of District Inspection Forms**

The Chief Engineer-Medical and Industrial may request the technical assistance of the Engineers-Medical and Industrial in development of the Inspection Forms that will be used by the District Monitors. The Engineers-Medical and Industrial will perform work as directed by the Chief Engineer-Medical and Industrial.

### **Train District Monitors**

The Engineers-Medical and Industrial will have primary responsibility for training the District Medical and Industrial Monitors. They will have been trained in industrial and medical waste management; the Service Specifications and Technical Requirements; and the specific activities to be performed by the Monitors. They may request the assistance of the Compliance Analysts-Medical and Industrial in developing training materials and delivering the training.

The initial Monitor training will occur during the Preparation Period. Based on the Contractor's Final Work Plans and the knowledge gained through their own training, the Engineers-Medical and Industrial will develop the training materials. The Monitor training will concentrate on teaching the Monitors the Service Specifications and Minimum Technical Requirements and the Contractor's Medical and Industrial Waste work plans, followed by in-the-field training. The Engineers-Medical and Industrial will submit draft training material to the Chief Engineer-Medical and Industrial for review and approval.

There will be periodic refresher training courses for all Monitors as well as initial training for newly hired Monitors. The objective of the refresher courses will be to update the Monitors on changes in the Contractor's service and interpretation of the Contract requirements.

### **Provide Technical Assistance to District Offices**

The Engineers-Medical and Industrial will serve as a technical resource for the District Managers who may contact them with day-to-day questions regarding field monitoring procedures.

### **Provide Service Quality Control and Consistency**

The Engineers-Medical and Industrial will regularly spend time in the field with District Monitors to observe their monitoring practices. The purpose of this work is to ensure that monitoring activities are consistent across all Districts and adhere to the procedures communicated in the training.

## **SECTION 5**

### **ZONE – FIXED FACILITIES DEPARTMENT**

#### **CHIEF ENGINEER-FIXED FACILITIES**

The Chief Engineer-Fixed Facilities will be the highest ranked technical staff person in the CMU for all Fixed Facilities. He/she must know:

- All aspects of: the Contractor's Final Work Plans for Processing and Transfer and Landfill Services.
- All aspects of other Final Work Plans dealing with Medical Waste Treatment Facilities and equipment yards.
- The Service Specifications, Minimum Technical Requirements, Performance Standards, and Performance Monitoring for these same services.
- The General Conditions of the Contract.

The Chief Engineer-Fixed Facilities will require this knowledge in order to act as the final authority and technical resource for the Department's staff regarding interpretation of the Contract and determination of Contractor compliance. He/she will also rely on this knowledge during interactions with the Zone Director, Compliance and Penalties Department, and the Contractor.

#### **Advise the Zone Director**

The Chief Engineer-Fixed Facilities will be responsible for all Department interactions with the Zone Director. He/she will serve as the Zone Director's Fixed Facilities expert. During meetings and negotiations with the Contractor, the Chief Engineer-Fixed Facilities will assist the Zone Director regarding interpretation of the Contract and Work Plans.

During the course of the Contract, the Contractor may propose changes in the design, equipment, and operations of fixed facilities. The Chief Engineer-Fixed Facilities will review, assess, and advise the Zone Director on these and other such issues. He/she may utilize the Department staff to perform research and analytical support.

#### **Interpret Specifications**

The Chief Engineer-Fixed Facilities will be responsible for technical interpretation and clarification of the Service Specifications and Minimum Technical Requirements. He/she will provide interpretation and clarification of the Service Specifications, Minimum Technical Requirements, Performance Standards, and Performance Monitoring to the Department staff.

## **Contractor Compliance**

The Chief Engineer-Fixed Facilities will ensure consistency and fairness in all compliance determinations. He/she will review Compliance Reports and send approved reports to the Compliance Analyst-Compliance and Penalties and the Operations Management Department.

The Chief Engineer-Fixed Facilities will attend all compliance meetings with the Contractor that deal with fixed facilities. The Chief Engineer-Fixed Facilities will provide technical support for solving problems regarding the Contractor's facilities.

## **Develop Fixed Facility Inspection Forms and Compliance Reports**

The Chief Engineer-Fixed Facilities will be responsible for developing the templates for all forms and reports utilized by the Fixed Facility Department to monitor the Contractor. He/she may use the Engineers and Compliance Analysts for Fixed Facilities to assist in the development of the Forms. Sample forms are provided in Appendix G to this document.

## **External Relations**

The Chief Engineer-Fixed Facilities may be called upon to provide testimony at legal, legislative, and regulatory hearings. His/her scope of engagement in these activities will be limited to technical aspects of fixed facilities.

The Chief Engineer-Fixed Facilities may also be invited to make technical presentations at conferences. Technical presentations to be given outside of the CMU shall be approved by the Zone Director.

## **DEPUTY CHIEF ENGINEER-FIXED FACILITIES**

The Deputy Chief Engineer-Fixed Facilities will assist the Chief Engineer-Fixed Facilities and supervise the Fixed Facility Monitors. He/she will be well versed in all aspects of the Service Specifications, Minimum Technical Requirements, Performance Standards, and Performance Monitoring for all fixed facilities.

## **Advise and Assist the Chief Engineer-Fixed Facilities**

The Chief Engineer-Fixed Facilities may utilize the Deputy Chief Engineer-Fixed Facilities to perform detailed analysis of facility design, construction, and operations as well as equipment specifications. The Deputy Chief Engineer-Fixed Facilities may also assist in the development of Inspection Forms for the Monitors and the Compliance Report format for the Compliance Analyst-Fixed Facilities. He/she will perform these services as directed by the Chief Engineer-Fixed Facilities.

## **Training and Technical Assistance for Compliance Analyst**

The Deputy Chief Engineer-Fixed Facilities will provide training and technical support to the Department's Compliance Analyst-Fixed Facilities. Evaluating a number of Performance Standards and measuring compliance will involve engineering skills. For example, for the Landfilling Service, it will be necessary to review construction drawings and engineering

calculations to determine if the Contractor has complied with minimum design standards for the landfill liner, maximum slopes, leachate collection and management, etc.

The Deputy Chief Engineer-Fixed Facilities will have the knowledge required to make these determinations. He/she will be responsible for training the Compliance Analyst in the preparation of Compliance Reports.

### **Training and Technical Assistance for Monitors**

The Deputy Chief Engineer-Fixed Facilities will be responsible for training the Fixed Facility Monitors. He/she will have been trained in solid waste and medical waste management, the Service Specifications and Technical Requirements, and the specific activities to be performed by the Monitors. They may request the assistance of the Compliance Analysts-Fixed Facilities in developing training materials and delivering the training.

The training shall be provided before the Contractor starts construction. The Deputy Chief Engineer-Fixed Facilities will utilize the Draft Work Plans to develop the training materials and to provide initial training to the Monitors. The objective of the training will be to make the Monitors familiar with the Service Specifications, Technical Requirements, and monitoring methods. He/she will submit training materials to the Chief Engineer-Fixed Facilities for review and approval.

Once the Contractor submits Final Work Plans, the Deputy Chief Engineer-Fixed Facilities will provide a final training for the Monitors that familiarizes them with any changes and refinements made in the Final Work Plans. The final training will be conducted at the Contractor's facilities during both the Preparation and Operations Periods.

The Deputy Chief Engineer-Fixed Facilities will conduct periodic refresher training courses for Fixed Facility Monitors as well as initial training for newly hired Monitors. The objective of the refresher courses will be to update the Monitors on changes in the Contractor's service and interpretation of the Contract requirements.

The Deputy Chief Engineer-Fixed Facilities will also serve as a technical resource person for the Monitors. The Monitors will seek his/her advice and guidance in performing their work.

### **Review Final Work Plans and Produce Engineering Reports**

The Deputy Chief Engineer-Fixed Facilities will receive a copy of the Contractor's Final Work Plans. He/she will review facility design drawings and engineering calculations and compare them to the Contract requirements. He/she will produce Engineering Reports for each facility detailing discrepancies between the Final Work Plans and the Service Specifications and Technical Requirements. He/she will submit the report to the Compliance Analyst-Fixed Facilities.

### **Review Reports and Produce Engineering Reports**

During the Preparation Period, the Deputy Chief Engineer-Fixed Facilities will receive copies of Monthly Preparation Reports. He/she will review as-built drawings and calculations and compare them to the Contract requirements. Each month, he/she will produce an Engineering Report for each service that identifies any discrepancies from the Service Specifications and

Minimum Technical Requirements. He/she will submit the report to the Compliance Analyst-Fixed Facilities.

During the Operations Period, The Deputy Chief Engineer-Fixed Facilities will receive copies of the Contractor's Monthly Operations Reports and Annual Operations Reports. Each month, he/she will review engineering aspects of the reports and produce an Engineering Report for each service that lists discrepancies between the Contractor's reports and the Service Specifications and Minimum Technical Requirements. He/she will submit the report to the Compliance Analyst-Fixed Facilities.

### **Quality Control for Monitoring**

The Deputy Chief Engineer-Fixed Facilities will regularly spend time in the field with Fixed Facility Monitors to observe their monitoring practices. The purpose of this work is to ensure that monitoring activities are consistent and adhere to the procedures communicated in the training.

## **COMPLIANCE ANALYST-FIXED FACILITIES**

The Compliance Analyst-Fixed Facilities will keep a copy of Appendix 2, Articles 1, 2, 3, 4, and 6 and Appendix 3 as well as the Contractor's Final Work Plans for these services. They shall be well versed in the Service Specifications, Technical Requirements, Performance Standards, and Performance Monitoring provisions as they apply to fixed facilities. They need not know provisions that apply only to collection services.

### **Review Final Work Plans and Produce Compliance Reports**

The Compliance Analyst-Fixed Facilities will receive the Contractor's Final Work Plans. He/she will create a checklist of all the elements that are required and confirm whether they are present in the Final Work Plans. The Analyst will provide a copy of each Final Work Plan to the Deputy Chief Engineer-Fixed Facilities. The Analyst will analyze the Final Work Plans and use the Engineering Reports as necessary to complete the analysis. The Analyst will identify each Contract Non-compliance, produce Final Work Plan Compliance Reports for each service, and submit them to the Chief Engineer-Fixed Facilities.

### **Review Reports and Produce Compliance Reports**

During the Preparation Period, the Compliance Analyst will receive the Monthly Preparation Reports from the Contractor. The Analyst will provide a copy of each Monthly Preparation Reports to the Deputy Chief Engineer-Fixed Facilities. He/she will create a checklist of all the elements that are required regarding fixed facilities and confirm whether they are present in the reports. The Analyst will identify areas of non-compliance, produce a Contractor Reporting Compliance Report, and submit it to the Chief Engineer-Fixed Facilities.

During the Operations Period, the Compliance Analyst will receive the Contractor's Monthly Operations Reports and Annual Operations Reports. The Analyst will provide a copy of the reports to the Deputy Chief Engineer-Fixed Facilities. He/she will create a checklist of all the elements that are required regarding fixed facilities and confirm whether they are present in

the reports. The Analyst will identify areas of non-compliance, produce a Contractor Reporting Compliance Report, and submit it to the Chief Engineer-Fixed Facilities.

### **Review Laboratory Analyses Conducted by the Contractor**

The Compliance Analyst will receive periodic laboratory analyses conducted by the Contractor. He/she will review analyses for completeness and determine whether lab results meet the Performance Standards.

### **Compile Inspection Forms and Produce Weekly Compliance Reports**

The Compliance Analyst will receive Fixed Facility Daily Inspection Forms. He/she will enter data from the Forms into an electronic database, identify areas of non-compliance, produce Weekly Compliance Reports for each service, and submit them to the Chief Engineer-Fixed Facilities.

### **Calculate Diversion Rate**

The Compliance Analyst will evaluate the Landfill/Processing Contractor's compliance with the diversion rate specification. Each month, the Compliance Analyst will tabulate all records for residential and commercial waste accepted by the Contractor at the designated processing and disposal facility (tonnes accepted). The Analyst will then tabulate all records for residential and commercial waste disposed by the Contractor in the engineered landfill (tonnes disposed). The Analyst will then measure compliance with the 20 percent diversion requirement using the following formula:

$(\text{tonnes accepted} - \text{tonnes disposed}) / (\text{tonnes accepted})$

## **FIXED FACILITY MONITORS**

The Fixed Facility Monitors will monitor the Contractor's fixed facilities during the Preparation and Operations Period. They will be on-site during all operating hours. The Monitors will be trained to know all aspects of the Contractor's Final Work Plans, Service Specifications, and Minimum Technical Requirements as they apply to fixed facilities. There will be four types of facilities to monitor:

- Processing and Transfer Facility(s).
- Landfill.
- Medical Waste Treatment Facility(s).
- Equipment Yard(s).

The Monitors will be trained to monitor all types of facilities and given work assignments that periodically rotate them among facilities.

Appendix C provides a detailed description of procedures to be followed by the Fixed Facility Monitors. The following is a list of their activities:

- Assess facility design and construction plans.

- Monitor Facility Construction.
- Monitor Facility Operations.
- Record and follow-up on Possible Violations
- Prepare Fixed Facility Daily Inspection Forms
- Coordinate with Contractor.



## **SECTION 6**

### **ZONE – PUBLIC AWARENESS AND COMMUNICATIONS DEPARTMENT**

#### **MANAGER**

The Manager will be responsible for implementing the Public Awareness and Communications strategy throughout the Southern Zone. He/she will also be responsible monitoring the Contractor's compliance with the Service Specifications and Minimum Technical Requirements relating to the Contractor's public awareness and communication strategy.

#### **Oversee Contractor Compliance**

The Manager will oversee the Contractor's compliance with service specs and tech requirements. He/she will attend compliance meetings, as requested by Zone Director, to provide expertise in resolving public information issues with the Contractor. The Manager will organize and host monthly coordination meetings with the Contractor's Public Information Program team. He/she will strive to ensure that there is good communication between the Contractor and the District PAC Coordinators.

He/she will review Compliance Reports and submit approved reports to the Compliance Analyst-Compliance and Penalties. He/she will also send a copy of the reports to the Operations Management Department.

#### **Support District Staff**

The Manager will have the lead responsibility for ensuring that District PAC Coordinators are trained for their jobs. He/she will likely serve as the lead instructor and mentor for the Coordinators. He/she will provide technical support and facilitate the implementation of Coordinator's District-level activities.

#### **Coordinate with Headquarters**

The Manager will obtain polling results from the Public Awareness and Communications Division at Headquarters. He/she will review these data to determine effectiveness of the Governorates PAC strategy within the Southern Zone. This will entail measuring Contractor compliance with the specifications in the General Conditions regarding public information (GC A2.5 & 4.3). He/she will provide feedback and input on Strategy to the Division. As well, he/she will review the results to gauge the effectiveness of the Contractor's public information program.

## **PUBLIC AWARENESS SPECIALIST**

### **Implement Zone-level Strategy**

The Public Awareness Specialist will have the responsibility for implementing the Zone-level PAC Strategy. The work will include organizing public events, coordinating print and media promotion programs, and writing articles for general publication.

### **Support District Staff**

The Specialist will assist the Manager to train and mentor PAC Coordinators. He/she will seek their feedback on effectiveness and impact of materials and events developed by the Department for use at the District level.

### **Monitor Contractor and Prepare Compliance Reports**

The Specialist will receive the Contractor's Final Work Plan for the Public Information Program. He/she will determine if the plan was received within 45 days of Contract signing. The Specialist will create a checklist of all required elements and determine if they are present in the Final Work Plans. He will determine whether the Contractor's programs comply with the Performance Standards, produce a Final Work Plan Compliance Report, and submit it to the Manager.

During the six month Preparation Period, the Contractor will submit Monthly Preparation Reports for Public Information to the Specialists. The Specialist will create a checklist of all required elements and determine if they are present in the Monthly Preparation Reports. He/she will enumerate Contract Non-compliances, produce a Contractor Reporting Compliance Report, and submit it to the Manager.

The Specialist will receive the Contractor's Monthly Operations Reports, Annual Operations Reports during the Operations Period. The Specialist will review them to measure compliance with the Performance Standards. He/she will create a checklist of all required elements and confirm whether they are present in the reports. He/she will list the Contract Non-compliances, produce a Contractor Reporting Compliance Report, and submit it to the Manager.

### **Report to Headquarters**

The Specialist will make sure to inform the PAC Division at Headquarters about any events organized at the Zone and District levels. This will include both advance notice of events as well as brief reports on the outcome of the events.

## **SECTION 7**

### **ZONE – COMPLIANCE AND PENALTIES DEPARTMENT**

#### **MANAGER**

The Manager will be responsible for the day-to-day functioning of the Department. He/she will supervise the technical work and review/approve the work of Department staff.

#### **Coordinate Compliance Issues with Contractor**

The Manager will chair the compliance meetings with the Contractor. Meetings will be held weekly. The objectives of these meetings will be to present new Service Orders (written instruction to the Contractor to provide service according to the Contract) to the Contractor; discuss the status of previous Service Orders; and resolve issues of difference between the Contractor and the GOC.

The Manager will lead the Department's efforts to resolve Contract compliance issues. He/she may utilize any of the technical and legal resources of his/her Department, Zone-level Technical Departments, and District Offices. He/she will have the authority to make compromises and define solutions to compliance problems and disputes.

#### **Report to Zone Director**

The Manager will receive all the Weekly Consolidated Compliance Reports. He/she will review these reports and send approved reports to the Zone Director and the Operations Management Department.

Each week the Manager will review the draft Service Orders. He/she will send approved Service Orders to the Zone Director and send a copy to the Operations Management Department.

Each week the Manager will review the draft Penalty Notices. He/she will send approved Penalty Notices to the Zone Director and send a copy to the Operations Management Department.

Each month, the Manager will review draft Payment Requests. He/she will send approved requests to the Zone Director for Contractor payment and send a copy to the Operations Management Department.

#### **COMPLIANCE ANALYST-COMPLIANCE AND PENALTIES**

#### **Receive and Refer Customer Complaints**

Although, Customers will be instructed to register all complaints directly with the Contractor, some complaints may be received at the Zone level. In such cases, complaints will be directed to the Compliance Analysts-Compliance and Penalties. Their initial response to each complaint should be to provide the complainant with the Contractor's Customer Service

telephone number and ask them to call the Contractor directly. If the complainant refuses to call the Contractor, the Analyst will record information about the complaint and report it to a Data Specialist in the appropriate District Office.

### **Monitor Contractor's Customer Service Office**

They will receive the Contractor's quarterly Complaint Record and other information that must be submitted with monthly reports. The Compliance Analysts-Compliance and Penalties will then cross-check the District records against the Contractor's records to determine whether the Contractor has properly handled those complaints. They will also check to see whether the Contractor has properly handled complaints that were received at its Customer Service Office. The Compliance Analysts-Compliance and Penalties may travel to the Contractor's Customer Service Office to review records as necessary.

The Compliance Analysts-Compliance and Penalties will determine if the Contractor is complying with the Performance Standards.

### **Prepare Weekly Consolidated Compliance Report**

The Compliance Analyst-Compliance and Penalties will receive the Compliance Reports from the four Technical Departments: Collection and Cleaning, Medical and Industrial, Fixed Facilities, and Public Awareness and Communication. The Analyst will compile these reports together and produce a Weekly Consolidated Compliance Report for the Contract. He/she will send this report to the Department Manager.

### **Contractor Service Orders**

Each week, the Compliance Analyst-Compliance and Penalties will receive the approved Weekly Consolidated Compliance Report. The Analyst will prepare draft Service Orders for each of the noncompliance issues listed in the Weekly Consolidated Compliance Report.

He/she will submit the draft Service Orders to the Department Manager.

The Compliance Analyst-Compliance and Penalties will receive a copy of all signed Service Orders. He/she will document and record Contractor responses to Service Orders. Certain Service Orders may be resolved in the meetings. For some Service Orders, the Compliance Analyst-Compliance and Penalties may need to field verify the Contractor's actions.

## **LAWYER-COMPLIANCE AND PENALTIES**

### **Advise Southern Zone CMU Senior Personnel**

The Lawyer will be the highest-ranking legal staff person for the Southern Zone. He/she will provide advice on legal matters to the Zone and District personnel and help them to understand legal interpretations made by Headquarters.

### **Coordinate with Headquarters Legal and Compliance Division**

The Lawyer shall refer all issues requiring legal interpretations to the Headquarters Legal and Compliance Division. At the request of the Legal and Compliance Division Director, the Lawyer may provide advice on Southern Zone Contracts.

### **Training and Technical Assistance**

As requested by the Legal and Compliance Division, the Lawyer will assist in training the Department Compliance Analysts-Compliance and Penalties for writing Service Orders. He/she will also assist in training the Department Accountant how to write Payment Notifications and Penalty Notices. He/she will be responsible for training District Monitors in civil laws and decrees in solid waste management.

### **Conduct Dispute Resolution**

If contract disputes arise between the GOC and the Contractor in the Southern Zone, the Lawyer will conduct dispute resolution with the Contractor. The Lawyer will prepare summary reports for all dispute resolution activities that he/she undertakes. He/she will submit reports to the Department Manager and send copies to the Operations Management Department.

## **ACCOUNTANT-COMPLIANCE AND PENALTIES**

### **Calculate Penalties**

The Accountant will receive the approved Weekly Consolidated Compliance Reports. Based on these, the Accountant will calculate the penalties that will be levied against the Contractor's invoice.

### **Contractor Payment and Penalties**

The Accountant will prepare draft Penalty Notices and send them to the Department Manager. He/she will receive copies of approved Penalty Notices.

The Accountant will receive the Contractor's invoices. He/she will deduct from the invoice amount any approved Penalty Notices sent to the Contractor during the time period covered by the invoice.

The Accountant will prepare a draft Payment Request and send it to the Department Manager. He/she will attach to the draft Payment Request copies of the Contractor invoice and a summary of penalty deductions that shows how the Payment Request was calculated.

## **SECTION 8**

### **ZONE – OPERATIONS MANAGEMENT DEPARTMENT**

The Operations Management Department will serve as the central information storage and archive for contract monitoring and management activities. It will receive the following reports:

- From District Offices:
  - Daily Monitoring Reports
  - Accumulated Waste Reports
  - Container Distribution Reports
  - Container Replacement/Repair Reports
- From Zone Technical Departments:
  - Weekly Compliance Reports
  - Final Work Plan Compliance Reports
  - Contractor Reporting Compliance Reports
- Compliance and Penalties Department:
  - Weekly Consolidated Compliance Reports
  - Draft Service Orders
  - Draft Penalty Notices
  - Draft Payment Requests
  - Dispute Resolution Reports
- Zone Director:
  - Service Orders
  - Penalty Notices
  - Payment Requests
  - Approved Weekly Consolidated Compliance Reports
  -

The Department will maintain archives of all items and provide access to them by CMU staff as needed. The Department will also provide administrative, office management, and logistical support to the District offices.

## **SECTION 9 ZONE DIRECTOR**

### **ZONE DIRECTOR**

The Zone Director will serve as the GOC Program Administrators official representative to the Contractor in the Southern Zone. He/she will be responsible for managing the Zone Department Managers and overseeing the District Offices.

#### **Review Consolidated Compliance Reports**

The Zone Director will receive Weekly Consolidated Compliance Reports. He/she will have final approval responsibility for the contents of the reports. He/she will send approved reports to the Compliance Analyst-Compliance and Penalties and send a copy to the Operations Management Department.

#### **Approve And Send Service Orders**

The Zone Director will receive draft Service Orders. He/she will revise and approve them. He/she will sign the final Service Orders and have them delivered to the Contractor. He/she will also send copies to the Compliance Analyst-Compliance and Penalties and to the Operations Management Department.

#### **Approve And Send Penalty Notices**

The Zone Director will receive draft Penalty Notices. He/she will revise and approve these Orders. He/she will sign the final Penalty Notices and have them delivered to the Contractor. He/she will also send copies to the Account-Compliance and Penalties and to the Operations Management Department.

#### **Approve And Send Payment Requests**

The Zone Director will receive Payment Requests. He/she will revise and approve the Requests. He/she will sign the final Payment Requests and have them delivered to Headquarters Finance and Administration Division. He/she will also send copies to the Contractor, the Accountant-Compliance and Penalties, and to the Operations Management Department.

#### **Regular Meeting With Contractor**

The Zone Director will attend and chair the regular meetings with the Contractor to discuss Contract compliance and to resolve disputes where possible.

#### **Report To And Assist The Goc Program Administrator**

The Zone Director will make regular reports to the GOC Program Administrator regarding the status of contract services in the Southern Zone. He/she will prepare and submit monthly

reports to the Administrator on Contractor performance. He/she may also assist the Administrator during negotiations regarding contract modifications.

#### **Approve Changes In Technical Implementation Of Contract**

The Zone Director will review and approve any changes in the technical requirements of the Southern Zone Contracts.

#### **Coordinate With Public Awareness And Communications**

The Zone Director will meet regularly with the Director of the Public Awareness and Communications Division at Headquarters. The purpose of these meetings will be to discuss PAC program implementation and to ensure that the program is addressing the needs of Customers in the Zone.



## **SECTION 10 HEADQUARTERS**

### **FINANCE AND ADMINISTRATION DIVISION**

The Division's activities that deal with Contractor are limited to tracking solid waste fee collection and processing Contractor's invoices.

#### **Track Fee Collection**

The Division will interact with other GOC governmental units to obtain information on the solid waste fee collected through electricity bills. Because Contractor's fees are to be covered in large part by the solid waste fee, the CMU needs accurate and timely reporting on the balance of accounts in order to determine whether or not fees are sufficient to cover Contractor costs. The Division will maintain historical records as well, so that it may evaluate past trends and better anticipate future needs.

#### **Handle Invoices**

The Division will receive Payment Requests and copies of Contractor invoices from the four Zone Directors. The Division will arrange for payment by GOC Finance Department. Contractor invoices will be received monthly throughout the Operation Period of the contracts.

### **LEGAL AND COMPLIANCE DIVISION**

The Division's activities that deal with the Contractor are limited to the transfer of GOC assets, facility permitting, legal interpretation of contract documents, legal arbitration, and training.

#### **Transfer of GOC Assets**

The Division will coordinate the legal transfer of GOC-owned assets to the Contractor as required by the Contract. This may include certain existing facilities and property.

#### **Permitting**

The Division will provide assistance to the Contractor for obtaining any necessary licenses and permits needed to perform the contracted services in the Zone.

#### **Legal Interpretation of Contract**

The Division will conduct analysis and render interpretations whenever required regarding the Contract Documents.

### **Legal Arbitration**

The Division will have the authority to arbitrate any legal issues that may arise between the GOC and the Contractor for the Southern Zone. This is formal arbitration and would be applied when a Zone-level dispute resolution is not successful.

### **Training**

The Division will be responsible for training the Compliance Analysts and Accountants in the Compliance and Penalties Department. The Division will train them how to properly prepare written Service Orders and Penalty Notices.

## **PUBLIC AWARENESS AND COMMUNICATION DIVISION**

The Division is responsible for developing and implementing Public Awareness and Communication Program for the entire Governorate. It will provide guidance and support as needed for the District offices. The Divisions activities will include:

- Develop and oversee implementation of the Public Awareness and Communications Strategy.
- Develop program media and literature.
- Produce press releases and host press conferences.
- Assist contractor in development of materials and programs, attend Zone level meetings.
- Seek outside sponsorships.
- Train Zone and District level PAC personnel, provide support for other CMU training.
- Provide technical assistance for Zone PAC Department during its review of contractor plans, and other matters.
- Manage third party contracts for polling studies to measure public awareness and provide polling results to Zone-level departments.

**APPENDIX A**  
**COLLECTION AND CLEANING MONITOR PROCEDURES MANUAL**

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## **INTRODUCTION**

Collection and Cleaning Monitors will be responsible for monitoring Customer use and Contractor provision of the following services within specific assigned geographic areas in the Southern Zone:

- Residential and Commercial Waste Collection Services:
  - Dwelling to Dwelling (DTD) Waste Collection Service
  - Building to Building (BTB) Waste Collection Service
  - Waste Pooling Site (WPS) Service
  - Large Commercial Generator (LCG) Service
- Street and Public Facility Cleaning Services:
  - Mechanical Sweeping of Primary Streets
  - Manual Sweeping of Primary and Secondary Streets
  - Cleaning of Unpaved Streets
  - Litter Collection from Public Facilities
  - Litter Basket Service

This Appendix describes the procedures that Collection and Cleaning Monitors (Monitors) will follow in evaluating Contractor compliance with each of the Service Specifications and Minimum Technical Requirements in Annex A, Articles 1 and 2 of Appendix 2, of the Request for Tenders for Solid Waste Management and Cleaning Services. It also addresses how Monitors will observe, promote, and motivate Customer observance of Egyptian Environmental Law and GOC solid waste decrees and ordinances.

The Specific Service Specifications and Minimum Technical Requirements that Monitors are responsible for monitoring are cited using the appropriate RFT reference in parentheses, e.g. (2.1.4). Text that is quoted directly from the RFT is in *Italics*.

## **MONITORING RESIDENTIAL AND COMMERCIAL WASTE COLLECTION SERVICES (ARTICLE 1)**

The overall objective of monitoring Residential and Commercial Waste Collection services will be to optimize the compliance of the Contractor with contract terms and of Customers with GOC solid waste related decrees and ordinances. To facilitate Monitor understanding and interpretation, the Service Specifications and Minimum Technical Requirements have been grouped into the following five categories:

- Monitoring of General Service Requirements

- Monitoring of Dwelling to Dwelling (DTD) Waste Collection Service
- Monitoring of Building to Building (BTB) Waste Collection Service
- Monitoring of Waste Pooling Site (WPS) Service
- Monitoring of Large Commercial Generator (LCG) Service

Separate sections for each category describing suggested monitoring procedures for evaluating Contractor compliance with each Service Specifications and Minimum Technical Requirement follow.

### **Monitoring General Service Requirements**

Service Specifications and Minimum Technical Requirements that apply to all types of Residential and Commercial Waste Collection Services can be grouped into the following ten categories:

- Reporting
- Ownership of Waste
- Waste Collection Frequency and Timing
- Waste Collection Practices
- Types of Waste to be Included
- Addition of New Customers
- Customer Service and Complaint Handling
- Waste Collection Equipment
- Waste Collection Personnel
- General Public Compliance with Solid Waste Laws and Decrees

### **Reporting --**

The Contractor is required to submit the following reports at various stages of the ten-year term of the Contract:

- Final Work Plan.
- Preparation Work Plan.
- Route Maps and Schedules.
- Monthly Preparation Reports.

- Monthly Operations Reports.
- Annual Operations Reports.

Although not having primary responsibility for evaluating Contractor compliance with most reporting requirements, Collection and Cleaning Monitors may be called upon to provide valuable input to the Collection and Cleaning Department (Department). Monitors should therefore be intimately familiar with the following specifications regarding reporting requirements:

- Final Work Plan (2.1.3)
- Preparation Work Plan (2.1.2)
- Route Maps and Schedules (2.9.2)
- Monthly Preparation Reports (2.9.1)
- Monthly Operations Reports (2.9.3)
- Annual Operations Reports (2.9.4)

### **Ownership of Waste --**

This specification applies to all types of Waste Collection Services. It is important that Monitors and Customers are aware of the GOC policy regarding solid waste ownership in order to avoid disputes that might arise in the future.

**Ownership of Waste (2.1.4)**-- *Once Residential and Commercial Solid Wastes have been set out for collection, such wastes shall become the property of the Contractor, except that the Customer, and only the Customer, may take back such wastes as he/she desires until such waste materials have been collected by the Contractor, at which time they shall become the sole and exclusive property of the Contractor.*

The policy adopted through this specification precludes any person other than the Contractor's employee from removing and taking ownership of the waste. This is meant to preclude scavenging by third parties, who might remove materials that the Contractor could use to meet the 20 percent diversion requirement, and thus it is extremely important for Monitors to enforce this policy. Moreover, once the waste is collected, ownership changes hands to the Contractor, and thus Customers are relieved of any potential liability that might result from improper handling and disposal.

### **Waste Collection Frequency and Timing --**

Paragraphs 2.3 and 2.4 provide service specifications relating to the frequency and timing for all types of Residential and Commercial Waste Collection Services. These specifications address the following:

- Collection Frequency
- MSW Collection Timing
- Bulky Waste Collection Timing



- Collection Time Changes
- Accommodation for Unusual Circumstances

**Collection Frequency (2.3.1)**-- *The Contractor shall provide service six days per week, on a scheduled route basis, Saturday through Thursday for each type of Residential and Commercial Waste Collection Service described in paragraphs 2.1 – 2.4. Specific procedures for monitoring this specification are provided below in the sections for each type of collection service.*

**MSW Collection Timing (2.3.3)** -- *To the extent practically possible, the Contractor shall commence waste collection on each route at the same point, at the same time and follow the same route.*

This specification is necessary to facilitate evaluation of compliance with the collection frequency specification. Monitors will, from time to time, make observations on certain streets or follow a collection crew to evaluate compliance with the Route Maps and Schedules (see 2.9.2) submitted by the Contractor

**Bulky Waste Collection Timing (2.3.4)** -- *With the exception of Fridays, the Contractor shall remove any Bulky Wastes placed within one (1.0) meter of other MSW set out at DTD, BTB and WPS collection points within twenty-four (24) hours of the time that MSW is collected.*

Monitors will enter randomly selected buildings for the purpose of identifying where Bulky Waste has been set out for collection. The Monitor will record the location of any Bulky Waste that is set out properly, notify the Contractor, and return 24 hours after the most recent MSW collection to verify that the Bulky Waste has been collected.

**Collection Time Changes (2.4.2)** -- *Once schedules have been adopted and routes established, the Contractor shall minimize the altering of collection times. If DTD and BTB collection times are advanced (moved earlier) more than one (1.0) hour without prior notification provided to Customers, the Contractor will be responsible for collecting any waste set out late on that day.*

Monitors will observe collection times on specific streets and observe collection route itineraries to evaluate compliance with Route Maps and Schedules (see 2.9.2) submitted by the Contractor. Monitors must use good judgment in assessing the impact of delays beyond the control of the Contractor that change collection time.

**Accommodation for Unusual Circumstances (2.4.3)** -- *Inclement weather conditions and various activities such as street repair, utility repair, utility installation, building construction, police action, fire suppression and neighborhood events may temporarily delay access to certain Customers. When such circumstances exist, the Contractor shall provide service either in advance or as soon as access is available during normal working hours. During times of severe weather as determined by the GOC Project Administrator, Residential and Commercial Wastes shall be collected at the first opportunity unless rescheduled by the GOC Project Administrator. The Contractor shall comply with all rescheduling instructions. Except for severe weather conditions, Monitors will be responsible for verifying that unusual circumstances justifying postponement of service provision do in fact exist, and that service is resumed as soon as access is available during normal working hours. If service is not*

resumed in compliance with this specification, the Monitor will verify the route number, time, and exact location of the non-compliance incident.

### **Waste Collection Practices --**

Paragraph 2.5 specifies collection practice requirements to ensure that the Contractor conducts all collection activities not only in compliance with the service specifications, but also in a manner that does not negatively impact Customers or the general public. This paragraph includes service specifications relating to the following collection practice issues:

- Disturbance
- Property Damage by Personnel
- Public Safety and Convenience
- Noise
- Street Usage Rights
- Compliance with Local Ordinances
- Waste Spillage
- Scavenging

**Disturbance (2.5.1)** -- *The Contractor shall take all reasonable steps practicable to minimize disturbance to Dwelling Unit and small commercial shop occupants, and obstruction to pedestrians and motor vehicle operators during the performance of all aspects of the waste collection process.*

Monitors will observe the operation of Contractor waste collection vehicles and personnel performing services to spot *disturbance* activities such as blocking access to buildings or vehicular and pedestrian traffic. On any such occasion the Monitor will record the vehicle identification number, the identification number of any personnel involved, the date, time and location, and a full description of the alleged occurrence.

**Property Damage by Personnel (2.5.2)** -- *The Contractor will be responsible for all costs associated with the repair and or replacement of damaged property of any kind that can be ascribed to the actions of its equipment, employees or agents. Collection crews shall report any incident that might have caused damage to third party property to the Contractor's General Manager, who shall in turn inform the GOC within eight (8.0) hours of such occurrence.*

While the no tolerance performance standard and associated penalty have been written to motivate self reporting, it will also be incumbent upon Monitors to closely observe buildings, stairways, sidewalks and utility poles that may have been damaged from collection crew activities. If the Monitor sees property damage occur he/she will record the vehicle identification number, the identification numbers of the collection crew members, the date, time and location, and a full description of the property damage.

Through the Public Information Campaign, all Customers will be encouraged to report alleged damage to the Contractor's Customer Service and/or GOC Project Administration Offices, or directly to Monitors.

**Noise (2.5.3)** -- *The Contractor shall take measures to minimize noise from collection equipment and the activities of waste collection personnel. Such measures shall include opening and closing waste container lids carefully, and only compacting wastes at a frequency necessary to achieve high compaction and efficient collection productivity.*

Monitors will observe collection crews and vehicles to ascertain if waste collection services are being performed in a manner that minimizes noise levels. Monitors should record and report incidents of unnecessary noise caused in servicing Rollout Carts and Bins, and compacting waste. If the Monitor observes excessive noise, he/she will record the vehicle identification number, the identification numbers of the collection crew members, the date, time and location, and a full description of the cause of the noise.

**Public Safety and Convenience (2.5.4)** -- *The Contractor shall perform his work in a manner that will minimize safety hazards, inconvenience and annoyance to the general public and property owners.*

Monitors will observe collection crews and vehicles to ascertain if adequate safety precautions are being taken in the performance of all waste collection services. Any activity the Monitor deems to be a potential threat to the safety of any citizen should be recorded on the Collection & Cleaning Daily Inspection Form and reported. The Monitor will record the vehicle identification number, the date and time, and the exact location of the alleged incident.

**Street Usage Rights (2.5.5)** -- *The Contractor is granted the right to use the streets for the purpose of providing waste collection services specified in the Contract, but is not granted exclusive use of such streets. When the Contractor's vehicle blocks the passage of other vehicles, the Contractor's vehicle shall pull aside at the first opportunity and allow waiting vehicles to pass.*

When monitoring the work of the waste collection crews, the Monitor will observe if the collection vehicle is operated in a manner that does not unnecessarily impede or block traffic. The potential for problems is greatest in the provision of Waste Pooling Site (WPS) Service, where the collection vehicle may be in a lane of traffic while Bins are brought to and emptied into the vehicle. Upon observation of such an occurrence, the Monitor will record the vehicle identification number, the date and time, and the exact location of the alleged incident.

**Compliance with Local Ordinances (2.5.6)** -- *The Contractor shall observe GOC Ordinances relating to obstructing streets, keeping passageways open and protecting same, and shall obey all laws and GOC ordinances controlling or limiting those engaged in waste collection service provision.*

When observing collection crews the Monitor will ascertain if all crew members perform activities in compliance with GOC decrees and ordinances related to waste collection service provision. Monitors will record alleged violations, citing the GOC decree or ordinance that is being violated.

**Waste Spillage (2.5.7)** -- *The Contractor shall not be responsible for cleaning up loose waste around any of the waste containers prescribed for each type of collection service where such*

*loose waste is caused by the carelessness of the Customer. However, the Contractor shall be responsible for removing any spillage that occurs due to the action of the Contractor's waste collection equipment and/or personnel.*

For all types of service, the Contractor will be required to leave a Non-Collection Notice when the Contractor encounters spillage caused by citizens. The Contractor will also be required to follow standard procedures for notifying the GOC about Non-Collection Notices.

However, waste spillage may be the result of (a) the Contractors' equipment and/or personnel, or (b) in the case of BTB, WPS, and LCG service, inadequate collection frequency or Cart/Bin capacity.

For DTD service, waste may be spilled at several places: at the point of collection, along the path that the collector travels between dwelling units in the building, along the sidewalk or street that the collector travels on his way to the collection vehicle, and at the collection vehicle. When a Monitor observes spilled waste anywhere along his daily path of travel, he/she must make a fair judgment as to the source of the spill, since it may have been either a waste generator or the Contractor. As Monitors increase their familiarity with public waste handling habits and the collection methods used by the Contractor, they will be able to make increasingly accurate determinations of the source of the waste spillage.

For BTB service, a potential exists for spillage as waste flows from the Rollout Cart into the receiving hopper of the collection vehicle. Monitors should make a special effort to observe emptying efficiency and report any spillage that is not promptly picked up by the collection crew.

Since Waste Pooling Sites (WPS) are unmanned and open to the public twenty-four hours per day, there is a high potential for waste spillage by Customers. It is incumbent upon the Monitors to closely monitor each WPS and work cooperatively with the Contractor and Customers to ensure that service frequency is adequate to prevent waste overflow.

**Scavenging (2.5.8)** -- *The Contractor shall forbid all waste collection crews from placing any MSW or Bulky Wastes inside or on the outside of Waste Collection Vehicles except in the waste storage area of the vehicle. The Contractor shall not allow collection crews to offload any materials while on collection routes or during transfer of waste materials to Designated Facilities.*

Scavenging of waste materials by crew members reduces collection productivity and presents a negative image of the Contractor and his services to the public. Therefore, a no tolerance performance standard and a large penalty have been established to discourage scavenging. Monitors will evaluate compliance with this specification by observing collection crew activities and by looking for scavenged materials on the collection vehicle, both inside and out of the cab.

If scavenging or scavenged materials are observed, the Monitor will record the vehicle identification number, the identification of the crew member caught scavenging, the scavenged material, the time, and the location of the incident.

## **Types of Waste to Be Included --**

To carry out their monitoring duties judiciously, Monitors must have complete knowledge of the types of waste that are considered to be Acceptable and not acceptable for inclusion in the wastes that Customers set out for collection. Types of waste to be included are addressed in the following two specifications.

**Municipal Solid Waste (MSW) (2.7.1)** -- *Wastes generated from dwelling units, residential, commercial, governmental and institutional buildings, and any other sources that have chemical and physical characteristics similar to those of wastes generated from dwelling units. It includes garbage, refuse, and other discarded materials including, but not limited to, solids, semi-solids, sludges, liquids, and contained gaseous waste materials.*

**Bulky Wastes (2.7.2)** -- *Items discarded from Dwelling Units and Buildings that are too large to fit in Suitable Containers that include, but are not limited to furniture and appliances, electronic products, automobile parts, trees and branches, palm fronds, and other vegetation.*

Municipal Solid Waste (MSW) and Bulky Wastes are the only two types of Acceptable Wastes; i.e. wastes that the Contractor will be responsible for collecting under any type of Residential and Commercial Waste Collection Service Waste Collection Service. Through the Public Information Campaign, Customers will be advised of what types of waste they can and cannot set out for DTD Waste Collection Service. *Acceptable wastes* are included in the above definitions and clearly do not include construction and demolition wastes, agricultural wastes, or hazardous wastes. Through knowledge gained in training, Monitors will be equipped with the capacity to mediate disputes between Customers and the Contractor regarding types of Acceptable Waste.

## **Addition of New Customers --**

Paragraph 2.10 requires the Contractor to extend services to new Customers.

*The Contractor shall extend routes and Waste Collection Services to any new Dwelling Unit, Building or Large Commercial Generator within twenty-four hours of notification from the GOC Project Administrator.*

Monitors should be aware that any type of new Customer is entitled to Waste Collection service within 24 hours of their notification to the GOC, and should be vigilant for, and report cases where the Contractor fails to do so as a possible violation of this specification.

## **Customer Service and Complaint Handling --**

Paragraph 2.11 requires the Contractor to offer a means for handling complaints from all categories of Customers. To optimize Customer usage, the system must be widely publicized and easy to use. To ensure the implementation of a system that meets these objectives, service specifications have been included for each of the following related issues:

- Office Requirements (2.11.1)
- Customer Service (2.11.2)
- Complaint Records (2.11.3)

- Complaint Reporting (2.11.4)
- Complaint Resolution (2.11.5)
- Unresolved Complaints (2.11.6)

Evaluation of Contractor compliance with specifications 2.11.1 through 2.11.4 will be the responsibility of the Compliance Analysts-Collection and Cleaning. Collection and Cleaning Monitors will not be directly involved in the evaluation of compliance with these specifications. However, when the Monitors and Data Specialists call the Customer Service Office with complaints received directly from Customers, they will record each instance when their call is not received within three minutes as a Violation.

**Complaint Resolution (2.11.5)** -- *The Contractor shall respond to all Customer complaints within twelve (12.0) hours, Fridays and holidays excluded. In particular, if a complaint involves a failure to collect from any Customer as required in the Contract, Contractor shall collect the MSW or Bulky Waste in question within twelve (12.0) hours of notification, provided it has been prepared for collection in accordance with the containerization and setout rules set forth in paragraph 3.2 herein.*

The Compliance Analysts-Collection and Cleaning will measure compliance with this specification by reviewing the complaint records submitted in the Contractor's Monthly Operations Report (MOR).

For each complaint received directly by Monitors and Data Specialists, the Monitors will follow up by visiting the source of the complaint 12 hours following its receipt. If the complaint has not been resolved, the Monitors will record it as a Violation.

**Unresolved Complaints (2.11.6)** -- *In the event that any GOC Project Monitor or Customer reports to the GOC that a complaint has not been resolved to the Customer's satisfaction, the Contractor shall submit a detailed report outlining the nature of the complaint and the proposed resolution or actions taken to resolve the complaint. If, in the opinion of the GOC Project Administrator, the proposed resolution or actions taken are insufficient to satisfactorily resolve the claim, the GOC at its reasonable discretion may require the Contractor to carry out a process to satisfactorily resolve the complaint.*

The Compliance Analysts-Collection and Cleaning will measure compliance with the specification by tabulating the number of unresolved complaints for which a satisfactory explanation was not provided.

The Compliance Analysts may instruct the District Monitors to perform spot checks to ensure that the Contractors have indeed resolved the complaints. Each month, the Compliance Analysts may randomly select from the Contractors' MOR up to five resolved complaints in each Monitor's territory. The Monitors will investigate each resolved complaint and determine if it was indeed resolved. If it was not resolved, the Monitor shall report it as a Violation of paragraph (2.11.5).

The GOC may also require the Contractor to carry out a process to resolve the complaint. When the Compliance and Penalties Department, as the agent of the GOC Project

Administrator, prescribes a complaint resolution that differs from that proposed by the Contractor, the Monitor will follow up to evaluate compliance with the GOC prescribed resolution.

### **Waste Collection Equipment --**

Section (3.1) specifies Minimum Technical Requirements to ensure that the Contractor utilizes waste collection equipment that meet the GOC's technical performance, health, safety, environmental, and aesthetic criteria. Minimum Technical Requirements relating to waste collection equipment include the following:

- General – Provision of Dedicated Fleet Inventory (3.1.1)
- Changes in the Collection Vehicle Fleet (3.1.2)
- Cargo Area of Waste Collection Vehicles (3.1.3)
- Use of Collection Vehicles without Hydraulic Compaction (3.1.4)
- Collection Vehicles with Hydraulic Compaction (3.1.5)
- Collection Vehicle Sanitation (3.1.6)
- Collection Vehicle Maintenance (3.1.7)
- Daily Collection Vehicle Inspection (3.1.8)
- Collection Vehicle Operation (3.1.9)
- Collection Vehicle Marking and Identification (3.1.10)
- Collection Vehicle Licensing and Inspection (3.1.11)
- Collection Vehicle Appearance (3.1.12)
- Ancillary Equipment (3.1.13)
- Collection Vehicle Storage Location (3.1.14)
- Reserve Equipment (3.1.15)
- Collection Vehicle Loading (3.1.16)

Collection and Cleaning Monitors are only responsible for evaluating Contractor compliance with Minimum Technical Requirements (3.1.3), (3.1.4), and (3.1.15), but should be completely familiar with all of the waste collection equipment requirements listed above.

**Cargo Area of Waste Collection Vehicles (3.1.3)** -- *The area of the waste collection vehicle body used for the compaction and storage of MSW shall be watertight and prohibit spillage of any solids or liquid waste materials, oil, grease or other substances onto the ground or*

*exterior body of the vehicle. Should any such solid waste, oil, grease, or other substances be dropped or spilled during the Contractor's operations, it shall be immediately cleaned up. Monitors will observe operating collection vehicles as well as vehicle routes of travel to look for spillage or leakage occurring, or having taken place. Monitors should make a special effort to observe the waste compaction process, as this is where spillage or leakage is most likely to occur. While the collection crew will be able to pick up solid materials that spill, it is unlikely that any liquid leakage will be able to be removed. For each observed occurrence of spillage or leakage that is not remedied the Monitor will record on the Collection and Cleaning Daily Inspection Form the vehicle identification number, time and location of the spillage, and the type of material that was spilled. Use of a camera to document the type and size of spill may also be helpful.*

**Use of Vehicles without Hydraulic Compaction (3.1.4)** -- *Wastes collected in each type of Residential and Commercial Waste Collection Service may be collected using vehicles without hydraulic compaction provided that:*

- *All wastes must be enclosed and covered when the distance between collection points exceeds 100 meters or the speed of the vehicle exceeds 30 km/hr.*
- *Such vehicles are equipped with a mechanical dumping mechanism.*
- *All wastes are transferred to vehicles with hydraulic compaction if the distance between the end point of the vehicle's collection route and the Designated Processing or Disposal Facility exceeds five (5.0) km.*

*Waste Collection Vehicles used solely for the purpose of providing Door-to-Door Waste Collection service are exempted from the requirements of this paragraph.*

Compliance with the requirement that such vehicles "are equipped with a mechanical dumping mechanism" will be determined by the Compliance Analysts-Collection and Cleaning during review of the Collection Vehicle Fleet Inventory.

Monitors will be responsible for evaluating compliance with the first and third clauses of this requirement. It is likely that Contractor use of vehicles without compaction will be limited to areas receiving DTD waste collection service. In the case of non-compliance, the Monitor should record the vehicle identification number, and the time and location of the incident on the Daily Inspection Form.

**Reserve Equipment (3.1.15)** -- *The Contractor shall have available at all times, reserve equipment which can be put in service within two (2) hours of any breakdown so that no interruption in regularly scheduled waste collection occurs. Such reserve equipment shall correspond in size and capacity to the equipment normally used by the Contractor to perform the Waste Collection Service.*

Collection & Cleaning Monitors will be responsible for identifying and recording any occasion where regularly scheduled collection is interrupted for more than two hours. The Monitor will record the Contractor's designated route number, the cause of the service



interruption, the estimated time that the service interruption started, when service was resumed, and the time that the route was finished.

### **Waste Collection Personnel --**

To ensure that the Contractor trains and deploys waste collection personnel in a manner that meets the GOC's technical performance, health, safety, environmental and aesthetic criteria, the RFT contains minimum technical requirements that address each of the following personnel related concerns:

- Competence and Skills
- Field Supervision
- Demeanor
- Uniforms and Safety Equipment
- Access to Private Property
- Driving Licenses
- Fees and Gratuities

**Competence and Skills (3.4.1)** -- *All Subcontractors, forepersons, and workers employed by the Contractor shall be competent and careful workers skilled in their respective trades.* The Compliance Analysts-Collection and Cleaning will be responsible for evaluating Contractor compliance with this Minimum Technical Requirement. Their evaluation will be based upon review of the list of management level personnel submitted with the Final Work Plan.

**Field Supervision (3.4.2)** -- *The Contractor shall assign a qualified Field Supervisor over each Service Sector and shall provide the name of that person in writing to the Contract Administrator. The Field Supervisor shall be present in the general area at all times that crews are working, and have radio communication with the Contractor's office and all Waste Collection Vehicles under his supervision.*

The Compliance Analysts-Collection and Cleaning will review the Final Work Plan for Street Cleaning Services to determine if qualified Field Supervisors have been assigned for each type of service.

The Collection and Cleaning Monitors will evaluate compliance with the requirement every day by verifying that a Field Supervisor is on duty to supervise the collection crew(s) in their work area. The Monitors shall communicate directly with the Field Supervisor once per day either in person or via radio/mobile and verify that the Field Supervisor has radio contact with the crews and Customer Service Office.

**Demeanor (3.4.3)** -- *The Contractor shall require all employees to conduct themselves in a courteous and helpful manner and refrain from using any loud or profane language.*

Collection and Cleaning Monitors will evaluate compliance with this requirement by direct observation of crew conversation to detect any use of loud or profane language and also solicit feedback from Customers concerning their interaction with Contractor employees.

**Uniforms and Safety Equipment (3.4.4)** -- *The Contractor shall provide all employees with adequate uniforms, hats, gloves, work boots, reflective vests and other protective clothing as necessary to maintain their appearance and safety. Uniforms and safety gear are subject to review and approval by the GOC.*

Collection and Cleaning Monitors will observe collection crews daily to evaluate compliance with this requirement. Monitors will check to see if every employee is in uniform and is equipped with a hat, gloves, boots, reflective vest and other necessary protective clothing. If any of these items are missing the Monitor will record on the Collection and Cleaning Daily Inspection Form the time and location of the observance and the identification number of the improperly dressed employee.

**Access to Private Property (3.4.5)** -- *The Contractor's employees shall not trespass or litter, cross property to adjoining premises, or meddle or tamper with property that does or should not concern them.*

Collection & Cleaning Monitors must be vigilant for evidence of personnel trespass on private property through direct observation of waste collection personnel activities and communication with Customers.

**Driving Licenses (3.4.7)** -- *Each driver of a collection vehicle shall at all times carry a valid Egyptian commercial driver's license and all other required permits.*

Monitoring this requirement will not be the responsibility of Collection and Cleaning Monitors. Fixed Facility Monitors will check for valid driver's licenses when each Waste Collection Vehicle leaves the Contractor's equipment storage facility.

**Fees and Gratuities (3.4.8)** -- *The Contractor shall not permit any employee, agent or subcontractor to offer special service beyond the scope of this Contract, or to request, solicit, demand, or accept, either directly or indirectly, any compensation or gratuity for services that fall within the scope of this Contract.*

Collection and Cleaning Monitors will evaluate compliance with this requirement by direct observation of crew interaction with Customers, and by occasionally asking Customers if they are aware of any solicitation of fees or gratuities for services outside the Contract. If a Monitor finds an employee violating this requirement, he/she will record the time, location, nature of violation, and employee identification on the Collection and Cleaning Daily Inspection Form.

### **General Compliance with Solid Waste Laws and Ordinances --**

Collection and Cleaning Monitors will be responsible for evaluating compliance of the Contractor and the general public with many existing GOC Decrees. The Collection and Cleaning Monitors will also be responsible for coordinating the enforcement of Egyptian Laws that relate to the handling and disposal of solid waste with the Egyptian Environmental Affairs Agency.

**Existing Law Pertaining to Collection of Solid Waste** -- While there are a number of national laws pertaining to solid waste management, Public Cleaning Law No. 38/1967 and its implementing Law, Ministry of Housing Decree No. 134/1968, provide the best guidance for promulgation of waste collection systems that will be in compliance with all national regulations. Pertinent articles that Monitors should be aware of, promote, and help to enforce include the following:

From Law No.38/1967:

- Article 1: It is forbidden to place waste in any location not identified by the Local Assembly.
- Article 2: All types of waste must be placed in containers to be emptied according to the conditions and specifications set forth in the executive regulation of this law.
- Article 6: Collectors of waste must have a license from the Local Assembly.

From the implementing Decree No. 134/1967:

- Article 1: Defines solid waste covered by the law.
- Article 2: Defines garbage collector.
- Article 4: Defines contractor as any entity assigned by the agency responsible for waste collection that collects and transports waste from the places defined in Article 1.
- Article 5: Allows the agency responsible for public cleanliness (CCBA) to collect and transport waste from places defined in Article 1 by specifying locations for placing waste, or require that those places put waste in specified containers and use the contractor hired by the responsible agency.
- Article 6: Requires that waste containers be manufactured from a solid material, have no holes, two handles and capacity suitable for the quantity of waste to be stored. Also allows the responsible agency to define container specifications including washing, storage, and placement for collection.
- Article 7: Requires contractor compliance with all specifications established in this Decree and by the responsible agency.
- Article 8: Assigns oversight responsibility for contractor employees and means of transportation to the responsible agency.
- Article 9: Allows the Local Assembly to define the maximum number of licenses to be provided to contractors and to establish rules that assure continuance of the contractors.
- Article 10: Allows the Local Assembly to protect the health of waste collectors by requiring uniforms and implementation of other protective measures.

- Article 11: Allows the Local Assembly to set times for waste collection based on local conditions.
- Article 12: Requires that waste collectors use containers that prevent spillage of waste during collection and allows the Local Assembly to establish additional specifications to maintain worker and operational cleanliness.
- Article 13: Allows for sorting of waste only at the collection vehicle and other specified areas.
- Article 14: Requires that vehicles used for collection be in good working condition, be leak-proof, covered, and internally lined with a material acceptable to the responsible agency. Requires contractors to inform the Local Assembly of the number and location of collection vehicles, and to comply with health regulations regarding truck washing.
- Article 16: Requires that the contractor pick up any waste that is spilled during transportation of wastes.

Monitors should note, and be prepared to explain to Customers, that many of the service specifications and minimum technical requirements included in the RFT are based upon the authority granted to the GOC by these two laws and their implementing regulations.

**Existing GOC Decrees** -- Monitors will be responsible for promoting (and possibly enforcing) general public compliance with the following GOC Governor Decrees;

- Decree 188/1991 Licenses for Disposal of Construction Wastes
- Decree 206/1992 Construction and Demolition Debris Removal/Fee
- Decree 738/1993 Littering of Public Streets by Waste Collection Vehicles
- Decree 388/1994 Payment of Waste Collection Fees by Shops
- Decree 647/1997 Mandatory Waste Collection Service/Payment
- Decree 601/1998 Prohibition of Private Dump Sites
- Decree 4583/1999 Empowerment of CCBA personnel to Enforce environmental Laws

New Governor Decrees likely will be promulgated prior to the start of the Contract Period that may extensively amend or rescind some of the existing Decrees listed above. In any event, intimate knowledge of the content and interpretation of all Decrees relating to solid waste management will be a prerequisite for monitoring, and thus will be covered in detail in Monitor training.

### **Monitoring Dwelling to Dwelling (DTD) Waste Collection Service**

Monitoring of Dwelling to Dwelling (DTD) Waste Collection Service will consist of evaluating Contractor compliance with general specifications and requirements addressed

earlier, as well as directly related specifications covered in this section. It will also include monitoring of Customer adherence to GOC solid waste decrees and ordinances.

Specifications that more closely define service provision and usage terms address the following issues:

- Description of DTD Service
- Hours of Service
- DTD Waste Container Requirements
- DTD Waste Container Placement

### **Description of Service (2.2.1) --**

*The Contractor shall collect all MSW placed in Suitable Containers, and Bulky Wastes set within one (1) meter of the common hallway door of individual Dwelling Units by the occupants, from all Dwelling Units in the DTD Waste Collection Service Sectors as illustrated on the maps.*

The Contractor must meet Performance Standards for Reliability and Quality. Reliability is measured by the number of Service Failures that are defined as follows:

*Any failure to provide any type of Residential and Commercial Waste Collection Service at the frequency prescribed in the Service Specifications.*

Thus, for evaluation of compliance with the Performance Standard for DTD Service Reliability, Monitors will use the following procedures to determine compliance with Collection Frequency (2.3.1):

- Monitors will enter randomly selected Buildings scheduled for DTD service after the scheduled collection time to observe if any waste remains uncollected. All properly set-out waste should have been collected.
- If uncollected waste was set out properly, The Monitor will inquire to determine if the waste was set out after the scheduled collection time by inquiring at the dwelling unit.
- If it was set out after 8:00 a.m. there is no violation and the Monitor will inform the Customer about setout requirements.
- If waste was set out prior to 8:00 a.m., the Monitor will record it as a Possible Violation, notify the Contractor's Customer Service Office of his/her observation, and will place a Service Notice on the waste. (The Service Notice will state that the Contractor has been instructed to collect the waste before 8:00 p.m., and if waste is not collected by 8:00 p.m. the Customer should call the District Office.)
- The Monitor will return the next day to each Possible Violation site (except those where the Customer already verified a Violation by calling as instructed on the Service Notice). If the Dwelling Unit occupant asserts that the waste was not collected prior to 8:00 p.m. the prior night, or if the waste is still not collected, the Monitor will record his observation as a Violation.

Incomplete Collections are used to measure DTD Waste Collection Service Quality. An Incomplete Collection is defined as follows:

*Collection from any type of Customer where the Contractor leaves residual MSW, Bulky Wastes or spillage without leaving a Non-Collection Notice that specifies the reason for leaving the materials.*

If a DTD Customer does not comply with waste setout and/or container specifications contained in paragraph (3.2.1), the Contractor must affix a Non-Collection Notice on the container explaining why collection service was not provided. Prior to the end of each workday the Contractor must notify the GOC Solid Waste Project Administrator of the location and reason for each Non-Collection Notices left that day. The Contractor is subject to penalties for failure to leave Non-Collection Notices also. Thus, for evaluation of compliance with the Performance Standard for Quality, Monitors must seek to identify an Incomplete Collection, i.e. whenever service has been provided, but some MSW, Bulky waste or spillage is left without a Non-Collection Notice.

#### **Hours of Service (2.4.4) --**

*DTD Waste Collection Service shall be provided during any hour of the day or night. The Contractor shall take reasonable measures to minimize noise levels and any other type of disturbance to Dwelling Unit occupants.*

Non-compliance may be verified by direct observation or from substantiated reports from dwelling unit occupants. Since the former is more defensible, District Managers should endeavor to schedule Monitor field duty to include hours shortly prior to and after the allowed collection hours.

#### **DTD Waste Containers (3.2.1) --**

*Recipients of DTD Waste Collection Service will be responsible for providing Suitable Containers for storage and set out of waste. With the exception of Bulky Waste items and other individually discarded items that exceed 0.25 cubic meters in size, all MSW must be placed in plastic bags and not exceed a maximum weight of 25 kg. The occupants of each Dwelling Unit may place plastic bags of MSW in rigid plastic or metal containers not exceeding 90 liters in volume. The Contractor shall not be required to collect any MSW that is not set out in the manner prescribed herein, provided that the Contractor leaves a Non-Collection Notice.*

The Contractor is not responsible for provision of waste storage containers for DTD Waste Collection Service. Recipients of DTD Waste Collection Service will be responsible for providing Suitable Containers for storage and set out of waste. Monitors must be entirely familiar with how waste is to be containerized, and what qualifies as a Suitable Container.

#### **DTD Waste Container Placement (3.3.1) --**

*The Contractor shall collect all containerized MSW in Suitable Containers meeting the specifications listed in paragraph (3.2.1) and non-containerized Bulky Wastes that is set out within one (1.0) meter of the common hallway door of any Dwelling Unit receiving DTD Waste Collection Service.*

Monitors will enter randomly selected Buildings in the DTD Service Sector of his monitoring route to evaluate both Contractor and Customer compliance with requirements. If service has already been provided to the Building, but the Monitor observes Acceptable Waste set out at a Dwelling Unit door, but more than one meter from the Dwelling Unit door, there should be a Notice of Non-Compliance attached to it. If not, the Monitor must ask the Dwelling Unit occupant if the waste was set out prior to, or after the collector came through the building. If set out before, then the Customer is not in compliance with the requirements, and the Contractor is not in compliance with the specification requiring that a Notice of Non-Compliance be left.

### **Monitoring Building to Building (BTB) Waste Collection Service**

Monitoring of Building-to-Building (BTB) Waste Collection Service will consist of evaluating Contractor compliance with general specifications and requirements addressed earlier, as well as directly related specifications covered in this section. It will also include monitoring of Customer adherence to GOC solid waste decrees and ordinances.

Specifications that more closely define service provision and usage address the following issues:

- Description of BTB Service
- Collection Hours
- Provision of Rollout Carts
- Distribution of Rollout Carts
- Placement of Rollout Carts
- Maintenance of Rollout Carts
- Replacement of Rollout Carts
- Repair of Rollout Carts

### **Description of BTB Service (2.2.2) --**

*The Contractor shall collect all MSW placed in Rollout Carts purchased and placed by the Contractor at each residential, institutional, commercial and mixed-use building, school, place of worship in the BTB Service Sectors as illustrated on the Services Maps. In addition, BTB Waste Collection Service shall include collection and disposal of Bulky Wastes that are placed within one (1) meter of the Rollout Cart.*

The Contractor must meet Performance Standards for Reliability and Quality. Reliability is measured by the number of Service Failures which are defined as follows:

*Any failure to provide any type of Residential and Commercial Waste Collection Service at the frequency prescribed in the Service Specifications.*

Thus, for evaluation of compliance with the Performance Standard for BTB Waste Collection Service Reliability, Monitors will use the following procedures to determine compliance with Collection Frequency (2.3.1):

- The Monitor will make a mark with chalk on the Rollout Cart wheel (at the 9 o'clock position) at randomly selected Buildings before the scheduled collection time.
- The Monitor will return after the scheduled collection time to observe if the Rollout Cart has been serviced. This determination should be made by observing if the chalk mark is in a different position which would indicate that the cart has been moved.
- If the Cart has been moved, the Monitor will assume that it has been serviced.
- If it appears the Cart has not been moved the Monitor will contact the Contractor's Customer Service Office, request that it be serviced before 8:00 p.m. that same day, and record it as a Possible Violation.
- The Monitor will return to the same Rollout Cart the following day prior to the scheduled service time to determine if it was emptied as requested. If the chalk mark indicates that the Cart has not been serviced the Monitor will record it as a Violation.

Incomplete Collections are used to measure DTD Waste Collection Service Quality. An Incomplete Collection is defined as follows:

*Collection from any type of Customer where the Contractor leaves residual MSW, Bulky Wastes or spillage without leaving a Non-Collection Notice that specifies the reason for leaving the materials.*

Thus, for evaluation of compliance with the Performance Standard for Quality, Monitors will seek to identify whenever service has been provided, but some MSW is left in the Rollout Cart, or Bulky Waste or spillage is left outside the Cart.

### **Collection Hours (2.4.5) --**

*BTB Waste Collection Service may be provided during any hour of the day or night.*

This specification allows the Contractor to provide BTB waste collection service 24 hours per day, as "day" is interpreted as day or night. Therefore, it is likely that the Contractor will schedule some of the service to be provided at night in order to take advantage of decreased traffic. If so, monitoring should be scheduled to allow observation of BTB service during these nighttime shifts as well.

### **Provision of Rollout Carts (3.2.3) --**

*The Contractor shall be responsible for purchasing and distributing fully assembled and functional waste containers (hereinafter called Rollout Carts) for all Buildings designated to receive BTB Waste Collection Service. The Contractor shall supply Rollout Carts with a minimum storage capacity of sixteen (16) liters per Dwelling Unit. Rollout Carts shall be manufactured from recyclable and repairable linear, medium to high density polyethylene (HDPE) plastic, be equipped with two wheels to facilitate movement, and be capable of being serviced by Waste Collection Vehicles equipped with semi-automated hydraulically actuated dumping systems, and meet or exceed all of the technical specifications in paragraph 3.2.3.1. Compliance of the Rollout Carts (Carts) with the technical specifications will be evaluated by the Compliance Analyst-Collection and Cleaning, based upon comparison of the Cart technical specifications (3.2.3.1) with the Carts specified in the Final Work Plan.*



Monitors will be responsible for evaluating the minimum storage capacity requirement both at the time of Cart delivery and throughout the Contract period. The Monitors will determine the number of Dwelling Units in each building and calculate if the number of Carts that are provided yields at least a daily capacity of 16 liters per Dwelling Unit.

#### **Distribution of Rollout Carts (3.2.3.2) --**

*The Contractor shall deliver Rollout Carts to all Buildings in all BTB Service Sectors no earlier than fifteen (15) days, and no later than (3) days prior to the commencement of BTB Waste Collection Service. The Contractor shall retrieve Rollout Carts from any Customer that refuses or ceases to participate in the waste collection program.*

Monitors will evaluate Contractor compliance with the distribution schedule during the Preparation Period. They will confirm that no Carts are delivered to Buildings in their monitoring area prior to 15 days before the service start date. Monitors will be provided with a copy of the Contractor's distribution schedule. They will inspect each building in their monitoring area no later than five days before BTB service starts to determine if each Building has been provided with the minimum specified waste storage capacity. Monitors will record each site where a Bin is not absent on a Roll-cart and Bin Distribution Form and submit it to their Data Specialist.

#### **Placement of Rollout Carts (3.3.2) --**

*The Contractor shall place Rollout Carts for Building-to-Building Waste Collection Service taking into account user accessibility, servicing accessibility, health, safety and aesthetics. Customers shall place oversized Bulky Wastes within one (1.0) meter of the Rollout Cart(s) in a manner that will allow safe and efficient accessibility for Contractor equipment and employees.*

During the Cart distribution period the Monitors will inspect the placement of Carts and evaluate compliance with the user accessibility, servicing accessibility, health, safety and aesthetic criteria in the requirement. Monitors will endeavor to facilitate placement in a location that is mutually acceptable to the Customer and Contractor taking into account the criteria.

#### **Maintenance of Rollout Carts (3.2.3.3) --**

*The Contractor shall be responsible for monitoring, controlling, washing, sterilizing and otherwise maintaining Rollout Carts to ensure their preservation and long useful life. The Contractor's Final Work Plan shall include provisions for washing/sterilizing Rollout Carts at least twice annually and describe the program for compliance with this specification.*

Monitoring of BTB Service Sectors will include evaluation of Contractor compliance with the Cart maintenance requirement. Monitors will observe Carts daily on a routine basis to determine if aesthetic and functional performance standards are being maintained.

Monitors will verify if Carts are washed and sanitized at least twice annually and in accordance with the program described in the Final Work Plan by making field observations in areas where the Contractor has scheduled this work.

### **Replacement of Rollout Carts (3.2.3.4) --**

*Contractor's employees shall take care to prevent damage to Rollout Carts by unnecessary rough treatment. The Contractor at his own expense shall replace any damaged Rollout Cart within three (3) workdays at no cost to Customers. The Contractor shall report all Rollout Cart replacements to the GOC Solid Waste Contract Administrator in the Monthly Operations Report.*

Monitors will observe how collection crews treat Carts when moving and emptying them into the collection vehicle, and will make note of any unnecessary rough treatment caused by the crew or the dumping mechanism. Monitors will also observe the condition of Carts to detect any need for repair or replacement. If needed, the Monitor will record the Cart location, identification number, and condition on a special Cart Repair/Replacement Form. The Form will be turned in to the District Data Specialist and the Contractor will be notified via fax of the request for Cart repair or replacement. The Contractor will notify the District office of the resolution of the request, and the Monitor will then be asked to verify the action taken.

### **Repair of Rollout Carts (3.2.3.5) --**

*The Contractor shall be responsible for repair of Rollout Carts in areas to include, but not be limited to, hinged lids, wheels and axles. Within three (3) workdays of notification by collection crews, the GOC or a Customer of the need for such repairs, the Contractor shall repair the Rollout Cart or if necessary, remove the Rollout Cart for repairs and deliver a replacement Rollout Cart to the Building.*

Monitors will observe the condition of Carts to detect any need for repair or replacement. If repair is needed, the Monitor will record the Cart location, identification number, and condition on a special Cart Repair/Replacement Form. The Form will be turned in to the District Data Specialist and the Contractor will be notified via fax of the request for Cart repair or replacement. The Contractor will notify the District office of the resolution of the request, and the Monitor will then verify the action taken on the next day in the area.

### **Monitoring Waste Pooling Site (WPS) Waste Collection Service**

Monitoring of Waste Pooling Site (WPS) Waste Collection Service will consist of evaluating Contractor compliance with general specifications and requirements addressed earlier, as well as the directly related specifications covered below. It will also include monitoring of Customer adherence to GOC solid waste decrees and ordinances.

Specifications that more closely define service provision and usage address the following issues:

- Description of WPS Service
- Collection Hours
- Provision of Bins
- Distribution of Bins

- Placement of Bins
- Maintenance of Bins
- Replacement of Bins
- Repair of Bins

### **Description of Service (2.2.3) --**

*The Contractor shall procure, distribute, service (empty MSW contents), and maintain waste containers (Bins) with a minimum size of one (1.0) cubic meter and a maximum size of six (6.0) cubic meters. Bins shall be placed at sites subject to GOC approval. Bins shall be adequate, in number and size, to store all MSW (including Bulky Wastes) generated daily in the WPS Service Sectors as illustrated on the Services Maps.*

The Contractor must meet Performance Standards for Reliability and Quality. Reliability is measured by the number of times that any Bin overflows before it is serviced. Thus, for evaluation of compliance with the Performance Standard for WPS Service Reliability, Monitors will use the following procedures to determine compliance with Collection Frequency (2.3.1):

- The Monitor will inspect all Waste Pooling Sites on his/her daily route after the scheduled collection time to observe if the Bin has been serviced.
- Since the Contractor may service the Bin at any time of day, (see Collection Hours), Non-Compliance cannot be verified unless the observation is after 12:00 a.m. and the Monitor inquires to determine if the waste in the Bin was set out before or after the scheduled time of collection.

Failure to dump the Entire Contents or failure to pick up any spillage is used to measure WPS Waste Collection Service Quality. The Entire Contents is defined as follows:

*All of the MSW in a Rollout Cart or Bin that is loose and will transfer by gravity into the hopper of a Waste Collection Vehicle.*

Thus, for evaluation of compliance with the Performance Standard for Quality, Monitors will seek to identify whenever service has been provided, but some MSW is left in the Bin, or Bulky Waste or spillage is left outside the Bin.

### **Hours of Collection (2.4.6) --**

*WPS Collection Service may be provided during any hour of the day. The Contractor shall endeavor to service WPS during hours of least traffic congestion in the area surrounding a given WPS. At its sole discretion, the GOC may restrict hours of collection at Waste Pooling Sites in residential areas if they may be adequately serviced during other hours.*

This specification allows the Contractor to provide WPS waste collection service 24 hours per day, as “day” is interpreted as day or night. Therefore it is likely that the Contractor will schedule some of the service to be provided at night in order to take advantage of decreased traffic and easier access to Waste Pooling Site Bins. If so, monitoring should be scheduled to allow observation of WPS service during these nighttime shifts as well.

### **Provision of Waste Storage Containers (3.2.4) --**

*Bins will be procured, distributed, serviced, maintained and sanitized by the Contractor. Bins shall be manufactured from metal, have four (4) wheels to facilitate placement and movement, have a minimum capacity of one (1) cubic meter, and have attached covers. The Contractor shall maintain Bin appearance and functionality at all times.*

Compliance of the Waste Storage Containers (Bins) with the technical specifications in paragraph (3.2.4.1) will be evaluated by the Compliance Analyst-Collection and Cleaning, based upon comparison of the technical specifications with the Bins specified in the Final Work Plan. The Monitors will continuously evaluate Bin appearance and functionality for compliance with this requirement.

### **Distribution of Bins (3.2.4.2) --**

*The Contractor shall place all Bins at locations he selects for WPS Waste Collection Service no earlier than ten (10) days, and no later than two (2) days prior to commencement of WPS Collection Service. All Bins shall be placed in a manner that will facilitate Customer usage, while minimizing impediments to pedestrian and vehicular traffic and City beautification.*

Monitors will evaluate Contractor compliance with the distribution schedule during the Preparation Period. They will confirm that no Bins are delivered to sites in their area prior to 10 days before the service start date. Monitors will be provided with a copy of the Contractor's distribution schedule. They will inspect each site in their monitoring area no later than two days before WPS service starts to determine if each WPS has been provided with the number, size and type of Bins promised in the Final Work Plan. Monitors will record each site where a Bin is not absent on a Roll-cart and Bin Distribution Form and submit it to their Data Specialist.

### **Placement of Bins (3.3.3) --**

*The Contractor shall be responsible for providing Bins for Widespread Distribution in all WPS Service Sectors as well as in specified DTD and BTB Service Sector locations. Widespread Distribution shall mean that there shall be a Waste Pooling Site within fifty (50) meters of any Customer in any WPS Service Sector. The placement of Waste Pooling Site Bins shall be the responsibility of the Contractor. All Waste Pooling Sites shall be located on public property. The location of sites and individual Bins shall take into account the following:*

- *User accessibility.*
- *Servicing accessibility.*
- *Pedestrian and vehicular traffic flow.*
- *Public health and safety.*
- *Proximity to commercial businesses selling food and/or beverages.*
- *Visibility.*
- *Exposure to animals and birds.*

- *Overall aesthetics.*

*The GOC maintains the right to approve the location of individual Waste Pooling Sites and Waste Pooling Site Bins.*

*The Contractor will be responsible for collection of all Bulky Waste placed within two (2) meters of the Waste Pooling Site Bins.*

During the Bin distribution period the Monitors will inspect the placement of Bins and evaluate compliance with all of the criteria in paragraph (3.3.3). Monitors will verify that no Customer in any WPS Service Sector has to travel more than 50 meters to a WPS Bin. In the case of a dispute, Monitors will endeavor to facilitate placement of WPS Bins in locations that are mutually acceptable to the Customer and Contractor taking into account the criteria.

### **Maintenance of Bins (3.2.4.3) --**

*The Contractor shall be responsible for monitoring, controlling, washing, sterilizing and otherwise maintaining Bins to ensure their preservation and long useful life. The Contractor's Final Work Plan shall include provisions for washing/sterilizing bins at least once every three (3) months and describe the program for compliance with this specification.*

Monitoring of WPS Service Sectors will include evaluation of Contractor compliance with this Bin maintenance requirement. Monitors will observe Bins daily on a routine basis to determine if maintenance is adequate to ensure their, appearance, functionality, and long useful life.

By concentrating field observations in areas where the Contractor is scheduling Bin cleaning Monitors will verify if Bins are washed and sanitized at least four times annually and in accordance with the program described in the Final Work Plan.

### **Repair of Bins (3.2.4.5) --**

*The Contractor shall be responsible for repair of Bins in areas to include, but not be limited to, lids and hinges, wheels and axles, and all parts essential for the safe and efficient dumping of waste stored within the bin. Within two (2) workdays of notification by the GOC of the need for such repairs, the Contractor shall repair the Bin, or if necessary, remove the Bin for repairs and deliver a replacement Bin.*

Monitors will also observe the condition of Bins to detect any need for repair or replacement. If repair is needed, the Monitor will record the WPS Bin location, identification number, and condition on a special Bin Repair/Replacement Form. The Form will be turned in to the District Data Specialist and the Contractor will be notified via fax of the request for Bin repair or replacement. The Contractor will notify the District office of the resolution of the request, and the Monitor will then verify the action taken on the next day in the WPS Service Sector.

### **Replacement of Damaged Bins (3.2.4.6) --**

*Contractor's employees shall take care to prevent damage to Bins by unnecessary rough treatment. The Contractor at his own expense shall replace any Bin damaged by the Contractor, within two (2) workdays at no cost or inconvenience to Customers.*

Monitors will observe WPS service to witness how collection crews treat Bins when moving and emptying them into the collection vehicle, and will make note of any unnecessary rough treatment caused by the crew or the dumping process. Monitors will also observe the condition of Bins to detect any need for repair or replacement. If needed, the Monitor will record the WPS Bin location, identification number, and condition on a special "Bin Repair/Replacement Form. The Form will be turned in to the District Data Specialist and the Contractor will be notified via fax of the request for Bin repair or replacement. The Contractor will notify the District office of the resolution of the request, and the Monitor will then be asked to verify the action taken.

### **Monitoring Large Commercial Generator (LCG) Waste Collection Service**

Waste generators including, but not limited to hi-rise apartment buildings, hotels, restaurants, office buildings, government offices, supermarkets, and large retail stores throughout the Southern Zone that generate more than one (1.0) cubic meter of MSW and/or Bulky Wastes per day will be provided with Rollout Carts or Bins.

Monitoring of Large Commercial Generator (LCG )Waste Collection Service will consist of evaluating Contractor compliance in LCG Service Sectors with all of the above general specifications, the directly related specifications that follow, and LCG adherence to GOC solid waste decrees and ordinances.

Specifications in the RFT that more closely define LCG service provision and usage terms address the following issues:

- Description of Service
- Collection Hours
- Provision of Waste Storage Containers
- Customer Requirements

### **Description of Service (2.2.4) --**

*The Contractor shall procure, deliver, service (empty the MSW contents) and maintain waste containers (Rollout Carts or Bins) sufficient to store one day's generation of MSW for LCGs including, but not limited to public institutions, schools, places of worship, hotels, restaurants, office buildings, supermarkets and large retail stores that generate more than one (1.0) cubic meter of MSW per day in all Service Sectors of the Southern Zone.*

The Contractor must meet Performance Standards for Reliability and Quality. Reliability is measured by the number of times that any Waste Storage Container is not serviced according to the agreed upon schedule. Thus, for evaluation of compliance with the Performance

Standard for LCG Waste Collection Service Reliability, Monitors will use the following procedures to determine compliance with Collection Frequency (2.3.1).

- The Monitor will inspect LCG sites on his/her daily route after the scheduled collection time to observe if the Bin/Roll-out Carts have been serviced.

- Since the Contractor may service LCGs at any time of day, (see Collection Hours), Non-Compliance cannot be verified unless the observation is after 12:00 a.m. and the Monitor inquires to determine if the waste in the Bin/Roll-out Cart was set out before or after the scheduled time of collection.

Failure to dump the Entire Contents or failure to pick up any spillage is used to measure LCG Waste Collection Service Quality. The Entire Contents is defined as follows:

*All of the MSW in a Rollout Cart or Bin that is loose and will transfer by gravity into the hopper of a Waste Collection Vehicle.*

Thus, for evaluation of compliance with the Performance Standard for Quality, Monitors will seek to identify whenever service has been provided, but some MSW is left in the Waste Storage Container, or Bulky waste or spillage is left outside the Container.

### **Collection Hours (2.4.7) --**

*LCG Waste Collection Service may be provided at any time of day that is acceptable to the LCG Customer providing that service can be performed without extraordinary equipment noise levels to nearby Dwelling Units. The GOC Project Administrator may restrict collection hours due to excessive noise levels in residential areas.*

Waste collection from Large Commercial Generators is likely to be integrated with either BTB or WPS Waste Collection Service, depending upon the type of Waste Storage Container that the LCG has. For example, if an LCG has Rollout Carts, it probably will be serviced as part of a BTB waste collection route. Likewise, an LCG with Bins probably will be serviced as part of a WPS waste collection route. Thus, LCG service in many areas may be performed at night and Monitors should be assigned to perform monitoring duties simultaneously wherever possible to observe and evaluate if work related noise levels are excessive.

### **Provision of Waste Storage Containers (3.2.5) --**

*The Contractor shall supply Rollout Carts and/or Bins if the LCG generates an average of more than one (1.0) cubic meter of MSW and Bulky Wastes per day. Containers that meet or exceed the Minimum Technical Requirements listed in either paragraphs 3.2.3.1 or 3.2.4.1 are acceptable. The Contractor shall be responsible for maintaining the appearance and functionality of Rollout Carts and Bins placed at LCGs. All Rollout Carts and Bins located at LCGs shall be washed and sanitized on the schedule specified in the Final Work Plan submitted to the GOC, and at least once every three months.*

Each LCG will choose either appropriately sized Bin(s) or Rollout Cart for storage of its waste. As specified, Rollout Cart and Bin technical specifications must be equivalent to those that apply to BTB and WPS waste storage containers respectively. Monitors will oversee the distribution of waste storage containers to verify that each LCG receives the container of his/her choice.

Monitors will integrate the monitoring of the maintenance and sanitation of Rollout Carts and Bins with observation of similar containers used for BTB and WPS services. Monitors will evaluate Contractor compliance with each of the following requirements relating to Rollout

Carts and Bins as described in the previous sections for BTB and WPS waste collection services:

- Maintenance of Rollout Carts (3.2.3.3)
- Replacement of Rollout Carts (3.2.3.4)
- Repair of Rollout Carts (3.2.3.5)
- Maintenance of Bins (3.2.4.3)
- Repair of Bins (3.2.4.5)
- Replacement of Bins (3.2.4.6)

## **STREET SWEEPING AND PUBLIC FACILITY CLEANING SERVICES**

The overall objective of monitoring Street Sweeping and Public Facility Cleaning Services (hereinafter referred to as Street Cleaning Services) will be to optimize the compliance of the Contractor with contract terms and of Customers with GOC solid waste related decrees and ordinances. To facilitate Monitor understanding and use, Service Specifications and Minimum Technical Requirements and the prescribed monitoring procedure to evaluate compliance with each have been grouped into the following six categories:

- Monitoring of General Service Requirements
- Monitoring of Mechanical Sweeping of Primary Streets
- Monitoring of Manual Sweeping of Primary and Secondary Streets
- Monitoring of Litter Collection from Public Facilities
- Monitoring of Litter Basket Service
- Monitoring of Public Structure Washing

### **Monitoring General Service Requirements**

Service Specifications and Minimum Technical Requirements that apply to all types of Street and Public Facility Cleaning Services can be grouped into six categories:

- Reporting
- Service Timing
- General Work Practices
- Transfer, Processing and Disposal
- Customer Service and Complaint Handling



- Personnel Requirements

## **Reporting --**

The Contractor is required to submit the following reports at various stages of the Contract:

- Final Work Plan
- Preparation Work Plan
- Route Maps and Schedules
- Monthly Preparation Reports
- Monthly Operations Reports
- Annual Operations Reports

Although not having primary responsibility for evaluating Contractor compliance with most reporting requirements, Collection and Cleaning Monitors may be called upon to provide valuable input to the Department. Monitors should therefore be intimately familiar with the following specification for required reports:

- Final and Preparation Work Plans (2.1.2)
- Route Schedules and Maps (2.9.2)
- Monthly Preparation Reports (2.9.1)
- Monthly Operations Reports (2.9.3)
- Annual Operations Reports (2.9.4)

## **Service Timing --**

The performance of all types of Street Cleaning Services on a regular and consistent schedule allows customers to prepare for, and take the best advantage of them. To facilitate Customer usage of all services, the RFT contains specifications relating to the following four service timing issues:

- General Provisions
- Time Changes
- Timing Consistency
- Unusual Circumstances

**General Provisions (2.3.1)** -- *The Contractor shall provide services within the hours prescribed in this Section. The time that Street Cleaning Services are to be provided on each route shall be submitted in the Final Work Plan for approval by the GOC Project Administrator.*

The service hours are described below in separate sections for each Street Cleaning Service. The Final Work Plans will contain the Contractors' time schedule for each route, which will be evaluated for compliance with this specification by the Compliance Analysts-Collection & Cleaning.

Monitors may verify compliance on a daily basis by direct observation or from substantiated reports from Customers. Since the former is more defensible, District Managers should endeavor to schedule Monitor field duty to occasionally include hours shortly prior to and after the allowed service hours.

**Time Changes (2.3.2)** -- *Once schedules have been adopted and routes established, the Contractor shall minimize the altering of Street Cleaning times. During times of severe weather, Street Cleaning Services shall be performed at the first opportunity unless rescheduled by the GOC Project Administrator. The Contractor shall comply with all rescheduling instructions.*

Monitors will observe service times on specific streets and observe route itineraries to evaluate compliance with Route Maps and Schedules (see 2.9.2) submitted by the Contractor. Monitors must use good judgment in assessing the impact of delays beyond the control of the Contractor that result in service time changes.

**Timing Consistency (2.3.3)** -- *To the extent practically possible, the Contractor shall commence all Street Cleaning Services on each route at the same point, at the same time and follow the same route each time that the Service is provided. The Contractor shall make every reasonable effort to schedule Street Cleaning Services within twelve hours (12.0) after Residential and Commercial Waste Collection Service has been provided.*

This specification is necessary to facilitate evaluation of compliance with the service frequency specification for each type of service. Monitors will, from time to time, make observations on certain streets or follow Street Cleaning crews to evaluate compliance with the Route Maps and Schedules (see 2.9.2) submitted by the Contractor

**Accommodation for Unusual Circumstances (2.3.4)** -- *Inclement weather conditions and various activities such as street repairing, utility repair, utility installation, building construction, police action, fire suppression and neighborhood events may temporarily delay access to streets and roads. The Contractor shall notify the GOC Project Administrator within four(4) hours whenever any Street Cleaning service is prevented for any of the above circumstances. Street Cleaning Services deferred shall be completed the next regularly scheduled workday.*

Except for severe weather conditions, Monitors will be responsible for verifying that unusual circumstances justifying postponement of service provision do in fact exist, and that service is performed on the next regularly scheduled workday. If service is not resumed in compliance with this specification, the Monitor will document the route number, time and exact location of the potential non-compliance incident.

## **General Work Practices --**

Paragraph (2.4) specifies cleaning personnel work practice requirements to ensure that the Contractor conducts all activities not only in compliance with the service specifications, but

also in a manner that does not negatively impact Customers or the General Public. This paragraph includes service specifications relating to the following collection practice issues:

- Disturbance
- Property Damage
- Noise
- Public Safety and Convenience
- Street Usage Rights
- Compliance with Local Ordinances
- Spillage
- Scavenging
- Public Diplomacy

**Disturbance (2.4.1)** -- *Contractor shall provide Street Cleaning Services with as little disturbance as practically possible to Dwelling Units and small commercial shop occupants and with minimal obstruction to pedestrians and motor vehicle operators.*

Monitors will observe the operation of Contractor Street Cleaning equipment and personnel to spot *disturbance* activities such as blocking access to buildings or vehicular and pedestrian traffic. On any such occasion the Monitor will record the vehicle identification number of the Street Cleaning equipment, the identification number of any personnel involved, the date, time and location, and a full description of the alleged occurrence.

**Property Damage (2.4.2)** -- *Care shall be taken to prevent damage to private or public property. The Contractor shall be responsible for all costs associated with the repair and or replacement of damaged property of any kind that can be ascribed to the actions of its equipment, employees or agents. Street Cleaning personnel shall report any incident that might have caused damage to third party property to the Supervisor, who shall in turn inform the GOC within eight (8.0) hours of such occurrence.*

While the no tolerance performance standard and associated penalty have been written to motivate self reporting, it will also be incumbent upon Monitors to closely observe property contiguous to streets and sidewalks that may have been damaged from any Street Cleaning crew activity. If the Monitor sees property damage occur he/she will record the vehicle identification number of the Street Cleaning equipment, the identification numbers of the cleaning crew members, the date, time and location, and a full description of the property damage.

**Noise (2.4.3)** -- *The Contractor shall take all reasonable measures to minimize noise from Street Cleaning equipment and the activities of Street Cleaning personnel.*

Monitors will observe Street Cleaning crews and vehicles to ascertain if Street Cleaning crews are taking all reasonable measures to minimize noise levels. Monitors should record and report incidents of unnecessary noise, such as Mechanical Street Sweeper engine noise or dumping of Manual Sweeper Carts. If the Monitor observes excessive noise, he/she will record the vehicle identification number, the identification numbers of the cleaning crew members, the date, time and location, and a full description of the cause of the noise.

**Public Safety and Convenience (2.4.4)** -- *The Contractor shall perform Street Cleaning services in a reasonable manner that will strive to minimize inconvenience and annoyance to the general public and property owners.*

Monitors will observe Street Cleaning crews and equipment to ascertain if adequate safety precautions are being taken in the performance of all services. Any activity the Monitor deems to be an unnecessary inconvenience, annoyance, or potential threat to the safety of any citizen should be recorded on the Collection & Cleaning Daily Inspection Form and reported.

**Street Usage Rights (2.4.5)** -- *The Contractor is granted the right to use the Streets for the purpose of providing Street Cleaning services specified in the Contract, but is not granted exclusive use of such Streets. When the Contractor's equipment or personnel block the passage of vehicles or pedestrians, they shall pull aside at the first opportunity and allow waiting vehicles and pedestrians to pass.*

When monitoring the work of Street Cleaning crews, the Monitor will observe if equipment is operated in a manner that does not unnecessarily impede or block traffic. The potential for problems is greatest in the provision of Mechanical Street Sweeping Service, where the Mechanical Sweeper will necessarily be in a lane of traffic while sweeping. If the Mechanical Sweeper operator does not make an effort to allow vehicles to pass, the Monitor will record the Sweeper's vehicle identification number, the date and time, and the exact location of the alleged incident. Monitors should also observe Manual Sweepers to verify that they are performing their activities with the least possible impedance to vehicles and pedestrians.

**Compliance with Local Ordinances (2.4.6)** -- *The Contractor shall observe GOC ordinances relating to obstructing streets, keeping passageways open and protecting same, and shall obey all laws and GOC ordinances controlling or limiting those engaged in Street Cleaning service provision.*

When observing Contractor crews the Monitor will ascertain if all crew members perform activities in compliance with GOC decrees and ordinances related to Street Cleaning services. Monitors will record alleged violations, citing the GOC decree or ordinance that is being violated.

**Spillage (2.4.7)** -- *The Contractor shall be responsible for any spillage that occurs due to the work activities of Street Cleaning Equipment and/or personnel. During transport, all Street Sweepings and Litter shall be contained, covered or enclosed so that spilling and blowing of any such material is prevented.*

There is a potential for spillage of Street Sweepings and Litter from Mechanical Sweepers when offloading, or from Manual Sweeper Carts at any point in their use. Monitors will

observe these and all other Street Cleaning activities to evaluate compliance with all aspects of this specification.

**Scavenging (2.4.8)** -- *The Contractor shall forbid all Street Cleaning personnel from scavenging.*

Scavenging is presently a common practice among manual street sweepers in the GOC. Monitors will have to make a special effort to closely observe the actions of Manual Sweepers to discourage and eliminate this widespread practice. Monitors will record and report on the Collection & Cleaning Daily Inspection Form the time, location, incident details, and the identification number of any Manual Sweeper alleged to be scavenging.

**Public Diplomacy (2.4.9)** -- *All Street Cleaning personnel employed by the Contractor shall be trained to deal with the public in a courteous, helpful and non-contentious manner.*

Long term public support of improved Street Cleaning services in the Southern Zone of the GOC will be greatly impacted by how the employees of the Contractor interact with Customers. Therefore, the GOC has required that all Street Cleaning personnel employed by the Contractor be trained adequately to deal with Customers and the general public in a courteous, helpful and non-contentious manner. Monitoring of compliance with this requirement will consist of observing the interaction of Contractor employees with the public.

### **Transfer, Processing and Disposal --**

The GOC wants to be sure that the Contractor transfers, processes, and disposes all Street Sweepings, Debris, and Litter in a manner that is compatible with national laws, local ordinances, and environmentally sound best practices. To achieve these objectives, the RFT contains specifications addressing the following issues:

- Compliance with GOC and Egyptian Laws
- Transfer of Street Sweepings and Litter on Public Streets
- Designated Processing and Disposal Facilities

**Compliance with GOC and Egyptian Laws (2.7.1)** -- *No Street Sweepings shall be transferred, processed or disposed in a manner prohibited by GOC or Egyptian law.* Monitors will use their knowledge of GOC and Egyptian law to evaluate compliance by observing Street Cleaning activities and making judgments as to whether any observed activity is prohibited by GOC or Egyptian Law.

**Transfer of Street Sweepings and Litter on Public Streets (2.7.2)** -- *The Contractor shall be prohibited from transferring Street Sweepings from Street Cleaning Equipment to transfer vehicles in any manner that will result in impediments to pedestrian or vehicular traffic, result in the creation of blowing dust and/or the spillage of any collected materials, or pose a health or safety threat to any individual or commercial business.*

Monitors will need to become familiar with the systems which the Contractor proposes to use in transferring Street Sweepings from Mechanical Street Sweepers and Manual Sweeper Hand Carts. With knowledge of the process and proposed transfer locations Monitors should

then make a concerted effort to observe transfer operations on a regular basis to identify impediments to pedestrians or vehicular traffic, blowing dust and Litter or spillage.

**Designated Processing and Disposal Facilities (2.7.3)** -- *Street Sweepings and Litter shall be transported to Designated Transfer, Processing or Disposal Facilities, where the weight shall be measured and recorded using certified automated scales operated by GOC personnel.*

Collection and Cleaning Monitors will not evaluate Contractor compliance with this specification. Compliance will be evaluated by the Fixed Facility Monitors stationed at the Designated Transfer and Disposal Facilities, who will make certain that all Street Sweepings and Litter are weighed and recorded in the appropriate category of waste.

### **Customer Service and Complaint Handling --**

Paragraph (2.11) requires the Contractor to offer a customer service system that facilitates the receipt, recording, and resolution of inquiries and complaints from all categories of Customers. To optimize Customer usage, the system must be widely publicized and easy to use. To ensure the implementation of a system that meeting these objectives, service specifications have been included for each of the following related issues:

- Office (2.11.1)
- Customer Service (2.11.2)
- Complaint Records (2.11.3)
- Complaint Reporting (2.11.4)
- Complaint Resolution (2.11.5)
- Unresolved Complaints (2.11.6)

Evaluation of Contractor compliance with specifications (2.11.1) through (2.11.4) will be the responsibility of the Compliance Analysts-Collection and Cleaning. Collection and Cleaning Monitors will not be directly involved in the evaluation of compliance with these specifications, but should be aware of their content and purpose. However, when the Monitors and Data Specialists call in complaints received directly from Customers, they will record each instance when their call is not answered within three minutes as a Violation.

**Complaint Resolution (2.11.5)** -- *The Contractor shall respond to all Customer complaints received directly or from the GOC Customer Service Office. If a complaint involves a failure to provide any Street Cleaning Service as specified in this Article, the Contractor shall perform the service in question within twelve (12.0) hours of notification from the GOC.*

The Compliance Analysts-Collection and Cleaning will measure compliance with this specification by reviewing the complaint records submitted in the Contractor's MOR. In addition, for each complaint received directly by Monitors and Data Specialists, the Monitors will follow up by visiting the source of the complaint 12 hours following its receipt. If the complaint has not been resolved, the Monitors will record it as a Violation.

**Unresolved Complaints (2.11.6)** -- *In the event that a Customer or GOC Project Monitor reports that a complaint has not been resolved to the Customer's satisfaction, the Contractor shall submit a detailed report to the GOC Project Administrator outlining the nature of the complaint and the proposed resolution or actions taken to resolve the complaint. If, in the opinion of the GOC Project Administrator, the proposed resolution or actions taken are insufficient to satisfactorily resolve the claim, the GOC at its reasonable discretion may require Contractor to carry out a process to satisfactorily resolve the complaint.*

The Compliance Analysts-Collection and Cleaning will measure compliance with the specification by tabulating the number of unresolved complaints that a satisfactory explanation was not provided by the Contractors. The Compliance Analysts may instruct the District Monitors to perform spot checks to ensure that the Contractors have indeed resolved the complaints. Each month, the Compliance Analysts will randomly select [*five or some other number*] resolved complaints from the Contractors' MOR in each Monitor's territory. The Monitors will investigate each resolved complaint and determine if it was indeed resolved. If it was not resolved, the Monitor shall report it as a Violation (of 2.11.5)

The GOC may also require the Contractor to carry out a process to resolve the complaint. When the Compliance and Penalties Department, as the agent of the GOC Project Administrator, prescribes a complaint resolution that differs from that proposed by the Contractor, the Monitor will follow up to evaluate compliance with the GOC prescribed resolution.

### **Personnel Requirements --**

To ensure that the Contractor trains and deploys Street Cleaning personnel in a manner that meets all of the GOC's technical performance, health, safety, environmental and aesthetic criteria, the RFT contains minimum technical requirements that address each of the following personnel related concerns:

- Competence and Skills
- Dismissal Authority
- Field Supervision
- Demeanor
- Uniforms and Safety Equipment
- Access to Private Property
- Scavenging
- Drivers Licenses
- Fees and Gratuities

**Competence and Skills (3.5.4)** -- *All Subcontractors, forepersons, and workers employed by the Contractor shall be competent and careful workers skilled in their respective trades.*

The Compliance Analysts-Collection and Cleaning will be responsible for evaluating Contractor compliance with this Minimum Technical Requirement. Their evaluation will be based upon review of the proposed skills of Street Cleaning labor and management level personnel submitted with the Final Work Plan.

**Field Supervision (3.5.5)** -- *The Contractor shall assign qualified Field Supervisors over each Service Sector and type of Street Cleaning Service and shall provide the names of those persons in writing to the GOC Contract Administrator. The Field Supervisor shall be present while crews are working and have radio communication with the Contractor's office and all Street Cleaning Vehicles under his supervision.*

The Compliance Analysts-Collection and Cleaning will review the Final Work Plan for Street Cleaning Services to determine if qualified Field Supervisors have been assigned for each type of service.

The Collection and Cleaning Monitors will evaluate compliance with the requirement every day by verifying that a Field Supervisor is on duty to supervise the street cleaning crew(s) in their work area. The Monitors shall communicate directly with the Field Supervisor once per day either in person or via radio/mobile and verify that the Field Supervisor has radio contact with the crews and Customer Service Office.

**Demeanor (3.5.6)** -- *The Contractor shall require all employees to conduct themselves in a courteous and helpful manner and refrain from using any loud or profane language.*

Monitors will evaluate compliance with this requirement by direct observation of Street Cleaning employee conversation to detect any use of loud or profane language and also solicit feedback from Customers concerning their interaction with Contractor employees.

**Uniforms & Safety Equipment (3.5.7)** -- *The Contractor shall provide all Street Cleaning employees with adequate uniforms, gloves, work boots and other protective clothing as necessary to maintain their appearance and safety. Uniforms and safety gear are subject to approval by the GOC Project Administrator.*

Monitors will observe Street Cleaning crews daily to evaluate compliance with this requirement. Monitors will check to see if every employee is in uniform and is equipped with a hat, gloves, boots, reflective vest and other necessary protective clothing. If any of these items are missing the Monitor will record on the Daily Monitoring Form the time and location of the observance and the identification number of the improperly dressed employee.

**Access to Private Property (3.5.8)** -- *The Contractor's employees shall not trespass or litter, cross property to adjoining premises, or meddle or tamper with property that does or should not concern them.*

Street Cleaning personnel do not require access to any private property in order to perform their duties. Monitors must be vigilant for evidence of personnel trespass on private property through direct observation of personnel activities and communication with Customers.

**Scavenging (3.5.9)** -- *The Contractor shall prohibit any type of scavenging of materials by any Street Cleaning personnel.*



Scavenging of waste materials by Street Cleaning crews reduces productivity and presents a negative image of Contract services to the public. Therefore, a no tolerance performance standard and a large penalty have been established to discourage scavenging. Monitors will evaluate compliance with this specification by observing Street Cleaning crew activities and by looking for scavenged materials on Street Cleaning equipment; especially on Manual Sweeper Hand Carts.

If scavenging or scavenged materials are observed the Monitor, he should record the identification number of the employee caught scavenging, the scavenged material, the time, and the location of the incident.

**Driving Licenses (3.5.10)** -- *Each driver of any motorized Street Cleaning Vehicle shall at all times carry a valid Egyptian commercial driver's license and all other required permits.*

Monitoring this requirement will not be the responsibility of Collection and Cleaning Monitors. Fixed Facility Monitors will check for valid driver's licenses when Street Cleaning equipment leaves the Contractor's equipment storage facility.

**Fees and Gratuities (3.5.11)** -- *The Contractor shall not permit any employee, agent or Subcontractor to offer special service beyond the scope of this Contract, or to request, solicit, demand, or accept, either directly or indirectly, any compensation or gratuity for services that fall within the scope of this Contract.*

It is currently a common practice for Manual Sweepers to augment their income by offering waste collection and removal service to Dwelling Unit occupants, interrupting their normal sweeping duties. This is not acceptable under the new system. Monitors will evaluate compliance with this requirement by direct observation of employee interaction with Customers, and by occasionally asking Customers if they are aware of any solicitation of fees or gratuities for services outside the Contract. If a Monitor finds an employee violating this requirement, he/she will record the time, location, description of the violation and employee identification on the Collection & Cleaning Daily Inspection Form.

### **Monitoring of Mechanical Sweeping of Primary Streets**

Monitoring of Mechanical Sweeping will be performed simultaneously with monitoring of all other Waste Collection and Street Cleaning services. To accomplish GOC clean-up objectives will require that equal attention be devoted to Customers and the Contractor. Without any reduction in the indiscriminate littering habits of Customers it will be practically impossible to fairly judge the Mechanical Sweeping performance of the Contractor.

Monitoring of Mechanical Sweeping will consist of evaluating Contractor compliance with all of the general service specifications and requirements addressed earlier, as well as the directly related specifications covered in this section. It will also include monitoring of Customer adherence to GOC littering decrees and ordinances.

Specifications that more closely define Mechanical Sweeping service provision address the following issues:

- Description of Mechanical Sweeping Service

- Service Hours
- Street Cleaning Equipment

### **Description of Mechanical Sweeping Service (2.2.1) --**

*The Contractor shall mechanically wash, sweep and remove all Litter and Debris along all Curb Kilometers three times weekly from all Primary Streets list in the Supplemental Information (Appendix 7). The Primary Street shall include the paved area between the normal curb lines of a roadway whether actual curb lines exist or not, including Median Islands, but shall not include Traffic Islands, sidewalks, areas adjacent to the street or parking lots.*

The Contractor must meet Performance Standards for Reliability and Effectiveness. Reliability is measured as the percentage of street Curb Kilometers scheduled for Mechanical Sweeping that are *actually* swept on schedule. Curb Kilometers are defined as follows:

*All curbs located along one side of a street for a distance of one kilometer as measured by the GOC. Distances along Median Islands are not considered Curb Kilometers.*

Thus, to measure compliance, Monitors must identify and document the number of Curb Kilometers of Primary Streets that have not been swept on schedule.

Mechanical Street Sweeping Effectiveness will be measured as specified in paragraph (5.2.8) of the RFT. Measurement is based on the following seven-point rating scale of Street Cleanliness:

- 1.0 A clean street. No litter.
- 1.2 A clean street, except for a few traces or pieces of litter.
- 1.5 No concentration of litter. There are no piles of litter, and there are large gaps between pieces of litter, or small gaps between pieces of litter.
- 1.8 Litter is concentrated in spots; there may be either large gaps between piles of litter, or small gaps between pieces of litter.
- 2.0 Litter is concentrated and there are only small gaps between piles of litter.
- 2.5 Litter is highly concentrated with no gaps in the piles of litter. The litter is straight line along the curb.
- 3.0 Litter is very highly concentrated and there are no gaps between the piles of litter. The litter is a straight line along and over the curb.

Paragraph (5.2.8) includes Specifications for Sample Number and Timing, Quality Control, and Monthly Rating. In general, Monitors record separate Street Cleanliness ratings for individual “segments” of a street and sidewalk in each District, as agreed upon by the Contractor and the GOC. The District Manager ensures that the sample is statistically and geographically representative. The monthly schedule of street segments varies to ensure representative inspections of actual street conditions, including:

- Who rates the zone?
- What time of day the ratings are conducted?
- Which day of the week the ratings are conducted?

- Which week during the month the ratings are conducted?

Inspections can occur before street cleaning to evaluate Customer behavior, as well as after street cleaning is done to measure Contractor performance.

Monthly scorecard reports are produced to provide information on both the average Cleanliness Ratings given to streets and sidewalks, as well as the percent of total streets rated acceptably clean. Zones are then weighted by street mileage. Zones with more street mileage have more weight in determining overall District and Southern Zone Street Cleanliness Ratings.

To ensure quality control, Monitors will undergo quality assurance checks by the Chief Engineer of the Department and retraining if necessary. Inspections can be monitored to detect potentially biased ratings. Monthly “cross-checks” will also evaluate rating consistency between monitors. Ratings that may be in error will be voided, and streets rated again when necessary.

The monthly reports will be analyzed carefully to reveal the historical trend of the average Street Cleanliness rating and the overall rating achieved by the Contractor. Very small changes ( $<0.01$ ) in the rating are not meaningful. It must also be remembered that month-to-month cleanliness is influenced by many factors in addition to Contractor efforts, including seasons and weather, Customer compliance with parking rules, community events and religious holidays. Therefore, meaningful trends and the performance of the contractor will be identified by:

- Comparing the most recent monthly ratings to the same month of the previous year.
- Calculating quarterly averages for the Street Cleanliness rating.
- Comparing ratings between Districts.

### **Service Hours (2.3.5) --**

The Contractor shall schedule Mechanical Sweeping activities during hours that minimize interference with vehicular and pedestrian traffic and noise to contiguous residential neighborhoods. Emptying of Mechanical Street Sweepers shall take place only in locations approved by the GOC.

Mechanical Sweeping is scheduled for the low traffic hours for the reasons stated in the specification. Monitors will have to periodically be on duty during the nighttime. Monitors will make a special effort to identify and record any activities that unnecessarily impede vehicular and pedestrian traffic, or cause unwarranted noise. Monitors should also be cognizant of impediments to work performance that are not the fault of the Contractor, and should report them to the District Manager on the Collection and Cleaning Daily Inspection Form.

### **Street Cleaning Equipment --**

Paragraph (3.1) specifies Minimum Technical Requirements to ensure that the Contractor utilizes Street Cleaning equipment that meets the GOC’s technical performance, health,

safety, environmental and aesthetic criteria. Minimum Technical Requirements relating to Street Cleaning equipment include the following:

- General (3.1.1)
- Changes in Equipment Inventory (3.1.2)
- Street Cleaning Equipment Sanitation (3.1.4)
- Equipment Maintenance (3.1.5)
- Daily Mechanical Street Sweeper Inspection (3.1.6)
- Mechanical Street Sweeper Operation (3.1.7)
- Vehicle Marking and Identification (3.1.8)
- Vehicle Licensing and Inspection (3.1.9)
- Equipment Appearance (3.1.10)
- Ancillary Equipment (3.1.11)
- Street Cleaning Vehicle Storage (3.1.12)
- Reserve Equipment (3.1.13)
- Loading (3.1.14)
- Noise (3.1.15)
- Safety Markings (3.1.16)

Collection and Cleaning Monitors are only responsible for evaluating Contractor compliance with Minimum Technical Requirements (3.1.7), (3.1.13), and (3.1.15), but should be completely familiar with all of the street cleaning equipment requirements and the way in which they will be monitored.

**Mechanical Street Sweeper Operation (3.1.7)** -- *Only personnel specifically trained in the safe and efficient operation of Mechanical Street Sweepers shall operate them. All operators shall have all required permits and licenses and be able to make minor repairs and adjustments. The Contractor shall provide documentation to the GOC no later than ten (10) days prior to commencement of Street Cleaning Services that all Mechanical Street Sweeper operators have been provided operation and safety training and have passed a written examination and driving test.*

Evaluation of compliance with the ten-day notification specification will be the responsibility of the Compliance Analyst-Collection and Cleaning. The Analysts will receive the Contractor's documentation. They will review driver license and training documentation, make inquiries of the Contractor, and recommend to the Chief Engineer-Collection and Cleaning whether to approve the vehicle operators.

Daily compliance will be enforced by the Fixed Facility Monitor assigned to monitor the Contractor's collection vehicle storage and maintenance facility, who will check licenses as the vehicles leave the yard.

Additional specifications included under specification (3.1.7) will require Monitors to closely observe the Mechanical Sweeper operation and evaluate if the operator is doing the following:

**Operating Speed (3.1.7.1)** -- *On route, the operator shall keep the Mechanical Sweeper moving at a reasonable speed, and where cars are parked, make every effort to clean the gutter as close to the parked vehicle as possible.*

**Direction (3.1.7.2)** -- *The operator shall perform his operations so that the Mechanical Street Sweepers are traveling their routes in the normal direction of traffic.*

**Dust Control (3.1.7.3)** -- *The sweeper shall supply the proper volume and pressure at all times to control dust in accordance with the Performance Standard.*

**Sweeper Path (3.1.7.4)** -- *The path shall begin at the face of the curb, and include flow line of the gutter. Unless blocked by parked vehicles, the curb and gutter shall always be included with the sweeper path.*

**Number of Passes (3.1.7.5)** -- *When necessary to meet the Performance Standard, the Mechanical Street Sweeper operator shall make more than one pass.*

**Reserve Equipment (3.1.13)** -- *The Contractor shall have available at all times, reserve equipment which can be put in service within two (2.0) hours of any breakdown so that no interruption in regularly scheduled Street Cleaning Services occurs. Reserve equipment shall correspond in size, capacity and performance to the equipment normally used by the Contractor to perform the Street Cleaning Service.*

Collection and Cleaning Monitors will be responsible for identifying and recording any occasion where regularly scheduled service is interrupted for more than two hours due to the lack of reserve equipment. The Monitor will record the Contractor's designated route number, the cause of the service interruption, the estimated time that the service interruption started, when service was resumed, and the time that the route was finished.

**Noise (3.1.15)** -- *Noise emitting from any Mechanical Street Sweeper within 100 meters of any Dwelling Unit shall not exceed a level of seventy-five (75) decibels when measured at a distance of twenty-five (25) feet measured at a level of five (5.0) feet above ground level using the "A" scale of the standard sound level meter at slow response.*

The GOC will have a device to accurately measure noise levels. If a Monitor suspects that a Mechanical Sweeper is exceeding the noise level in the specification, then it should be subjected to a test to be arranged between the Contractor and the GOC.

## **Monitoring of Manual Sweeping of Secondary and Primary Streets**

Manual Sweeping is considered complementary to Mechanical Sweeping. On routes that receive both types of service it will be difficult to distinguish between the performances of each. The combined performance is to comply with the street cleanliness expectations of the GOC.

Monitoring of Manual Sweeping will consist of evaluating Contractor compliance with all of the General Service Requirements addressed earlier, as well as the specifications covered in this section. It will also include monitoring of Customer adherence to GOC littering decrees and ordinances.

The Monitors will closely observe and evaluate Contractor compliance with specifications that address the following:

- Description of Manual Sweeping Service
- Service Hours
- Manual Sweeper Clothing, Tools and Equipment

### **Description of Manual Sweeping Service (2.2.2) --**

*The Contractor shall manually sweep and remove all Litter and Debris from Primary and Secondary Streets six days per week, Saturday through Thursday. The term Secondary Street shall include any Road, Passageway or Alley constructed of asphalt, stone, tile, and brick or concrete or is otherwise hard surfaced.*

The Contractor must meet Performance Standards for Reliability and Effectiveness. Reliability is a measure of the percentage of blocks that are scheduled for Manual Sweeping that are actually swept on schedule.

Thus, for evaluation of compliance with the Performance Standard for Manual Sweeping Service Reliability, Monitors must identify and document the number of blocks of Primary and Secondary Streets that have not been swept on schedule. To do so, Monitors will be supplied with Manual Sweeping Route maps and Schedules for their assigned area. Monitors will observe all blocks scheduled for sweeping on the assigned route for that day.

Manual Street Sweeping Effectiveness will be measured as specified in paragraph (5.2.8) of the RFT. Measurement will be based on implementation of the seven-point rating scale of Street Cleanliness described in the Monitoring of Mechanical Street sweeping section. Monitors will rate Street Cleanliness according to the frequency and schedule agreed upon between the GOC and the Contractor

### **Service Hours (2.3.6) --**

*Manual Sweeping service shall be provided commencing no earlier than 7:00 a.m. and terminating no later than 7:00 p.m. unless otherwise specified by the GOC Project Administrator.*

To ensure that Manual Sweeping only takes place during the prescribed hours, the District Managers will schedule Monitors to occasionally be on duty prior to 7:00 a.m. and after 7:00 p.m. to determine if any work is being performed outside of those hours.

### **Manual Sweeper Clothing, Tools and Equipment --**

To ensure that the Contractor employs Manual Sweeping tools, equipment and personnel in a manner that meets the GOC's technical performance, health, safety, environmental and aesthetic criteria, the RFT includes Minimum Technical Requirements relating to the following:

- Manual Sweeper Hand Carts
- Manual Sweeper Protective Clothing
- Manual Sweeper Tools and Equipment

**Manual Sweeper Hand Carts (3.3.1)** -- *The Contractor shall procure Hand Carts (Trolleys) to be provided to each Manual Sweeper that shall be high quality, standard manufactured units that are durable, highly maneuverable, attractive, structurally sound, and facilitate manual sweeper loading and unloading.*

The Compliance Analysts-Collection and Cleaning (with the assistance of the Engineers-Collection and Cleaning) have responsibility for determining if the Hand Carts specified in the Contractor's Final Work Plan comply with this Minimum Technical Requirement and the Technical Specifications provided in (3.3.2). Monitors will evaluate ongoing compliance through inspection of Hand Carts that they see on their daily monitoring route.

**Manual Sweeper Protective Clothing (3.4.1)** -- *The Contractor shall provide all Manual Sweepers with protective clothing that shall include, but not be limited to the following:*

- *Safety shoes.*
- *Reflective vests.*
- *Coveralls with Contractor insignia (minimum of 3 sets).*
- *Hats.*
- *Gloves.*

It will be the responsibility of the Monitors to verify that each Manual Sweeper that they observe is wearing all of the specified protective clothing when the Sweeper is working. Monitors will document incidences of potential non-compliance by recording the location, time, route number, and identification number of the improperly clothed employee.

**Manual Sweeper Tools and Equipment (3.4.2)** -- *The Contractor shall equip each Manual Sweeper with a Hand Cart meeting the technical specifications in paragraph (3.3.2), as well as a broom, rake and shovel.*

Monitors will verify if Manual Sweepers that they encounter in their monitoring route are equipped with a broom, rake and shovel as part of their daily surveillance of Manual Sweeping activities. If not so equipped, it is a Violation and will be documented by the Monitor on the Collection and Cleaning Daily Inspection Form.

### **Monitoring of Cleaning of Unpaved Streets**

The objective of this service is to collect and remove Litter and solid wastes deposited intentionally or carelessly on unpaved streets. Unpaved streets cannot be “swept” in the conventional manner. Unpaved Streets are defined as any road, alley or passageway that does not have a paved surface that accommodates at least one lane of vehicular traffic. The three day per week service frequency is specified as a means to have service performed every other day.

Monitoring of Cleaning of Unpaved Streets will consist of evaluating Contractor compliance with all of the General Service Requirements addressed earlier, as well as the directly related specifications covered in this section. It will also include monitoring of Customer adherence to GOC littering decrees and ordinances. Monitors will be required to closely observe and evaluate Contractor compliance with specifications that address the following issues:

- Description of Service
- Service Hours

### **Description of Service (2.2.3) --**

*The Contractor shall gather and remove all loose Litter and Debris from Unpaved Streets three (3) days per week. The work area shall include all public portions of the street between Buildings that is used for vehicular and pedestrian traffic.*

To judiciously evaluate Contractor compliance with these specification, Monitors need a clear understanding of the definitions of Litter and Debris (see 2.6.2 and 2.6.3, respectively). They will also need a clear understanding of what area is included in “all public portions of the street between Buildings that is used for vehicular and pedestrian traffic.” This essential knowledge will be provided in the Monitor training. In addition, Monitors will be supplied with the route maps and service schedules that the Contractor submits with the Final Work Plan.

The Contractor must meet Performance Standards for Reliability and Effectiveness. Reliability is a measure of the percentage of kilometers of Unpaved Street length that are scheduled for cleaning that are actually cleaned on schedule.

Thus, for evaluation of compliance with the Performance Standard for Unpaved Street Cleaning Service Reliability, Monitors must identify and document the number of Unpaved Street kilometers that have not been swept on schedule. To do so, Monitors will be supplied with Unpaved Street Cleaning Route Maps and Schedules for their assigned area. Monitors will integrate observation of all Unpaved Streets scheduled for cleaning on the assigned route for that day.

Unpaved Street Cleaning Effectiveness will be measured as specified in paragraph (5.2.8) of the RFT. Measurement will be based on implementation of the seven-point rating scale of



Street Cleanliness described in the Monitoring of Mechanical Street sweeping section. Monitors will conduct Street Cleanliness ratings according to the frequency and schedule agreed upon between the GOC and the Contractor

### **Service Hours (2.3.7) --**

*Cleaning of Unpaved Streets shall occur between the hours of 7:00 a.m. and 7:00 p.m.*

To ensure that Cleaning of Unpaved Streets only takes place during the prescribed hours, the District Managers will arrange Monitor work hours to occasionally be on duty prior to 7:00 a.m. and after 7:00 p.m. to determine if any work is being performed outside of those hours.

### **Monitoring of Litter Collection from Public Facilities**

Monitoring of Litter Collection from Public Facilities will consist of evaluating Contractor compliance with all of the General Service Requirements addressed earlier, as well as the more detailed specifications covered in this section. It will also include monitoring of Customer adherence to GOC littering decrees and ordinances.

The Monitors will closely observe and evaluate Contractor compliance with specifications that address the following:

- Description of Service
- Service Hours

### **Description of Service (2.2.4) --**

*The Contractor shall provide manual labor to be on duty during all open hours to sweep up and remove all Litter and Debris from Public Facilities such as open general commercial markets, places of worship, parks, gardens, squares, train stations and bus stops, and any other sites that are listed in Appendix 7. This service shall include collecting all Litter from common areas of open general commercial markets, emptying all Litter Baskets and other waste receptacles, and placing collected waste into Bins located just outside the Market.*

This service will be similar to Manual Sweeping of Secondary Streets, but limited here to Public Facilities that have been identified by the GOC in Appendix 7 to the RFT. Each Monitor will be provided with a list of the Public Facilities that are located in his/her assigned monitoring area. It is expected that Monitors will be able to cover their assigned areas in three days, so the Litter Collection Service at each Public Facility will be observed at most twice weekly. To ensure that the service is being provided during late evening hours, the District Managers should schedule monitoring to occur at that time of day as well.

The Contractor must meet Performance Standards for Reliability and Effectiveness. Reliability is a measure of the percentage of Public Facilities that have the number of Manual Sweepers on duty that the Contractor has specified in his Final Work Plan.

Thus, for evaluation of compliance with the Performance Standard for Public Facility Litter Collection Service Reliability, Monitors must identify and document the number of Public Facilities where the number of Manual Sweepers on duty is not equal to the number that are scheduled to be on duty. To do so, Monitors will be supplied with Litter Collection Route

maps and Schedules for their assigned area. Monitors will observe all Public Facilities on their assigned route for that day.

Public Facility Litter Collection Sweeping Effectiveness will be measured as specified in paragraph (5.2.8) of the RFT. Measurement will be based on implementation of the seven-point rating scale of Street Cleanliness described in the Monitoring of Mechanical Street sweeping section. Monitors will perform Street Cleanliness ratings at Public Facilities according to the frequency and schedule agreed upon between the GOC and the Contractor

### **Service Hours (2.3.8) --**

*Litter Collection from Public Areas shall be performed on a continuous basis during all normal open hours, seven days per week.*

To ensure that this service is performed during all times specified, monitoring will have to be scheduled to occasionally allow observation at various times within the hours that various Public facilities are open.

### **Monitoring of Litter Basket Service**

Monitoring of Litter basket will consist of evaluating Contractor compliance with the General Service Requirements addressed earlier, as well as the directly related specifications covered in this section. It will also include monitoring of Customer adherence to GOC littering decrees and ordinances. The Monitor will closely observe and evaluate Contractor compliance with related specifications that address the following:

- Description of Service
- Service Hours
- Litter Basket Service-General
- Litter Basket Distribution Schedule
- Maintenance of Litter Baskets
- Contractor Care of Litter Baskets
- Repair of Litter Baskets
- Replacement of Litter Baskets

### **Description of Service (2.2.5) --**

The Contractor shall procure, distribute, service daily (empty contents), sanitize and maintain waste Litter Baskets along streets and in Public Areas with high volumes of pedestrian traffic designated by the GOC. Litter Baskets shall be placed in locations mutually agreed between the Contractor and the GOC. Approximately 10,000 Litter Baskets are to be installed.

The Contractor must meet Performance Standards for Litter Basket Service Reliability and Effectiveness. Reliability is a measure of the percentage of all Litter Baskets that are not serviced at least once per day. Thus, for evaluation of compliance with the Performance Standard for Litter Basket Service Reliability, Monitors must seek to identify and document

the number of Litter Baskets that have not been emptied that day. To do so, Monitors will use Litter Basket Route Maps and Schedules supplied by the Contractor for their assigned area that day to follow behind the Litter Basket Service crew and look for missed service.

Litter Basket Service Effectiveness will be measured as specified as the percentage of all Litter Baskets in service that are found full or overflowing each day. While emptying Litter Baskets once daily is the minimum requirement, this may not be enough in all cases to prevent the Litter Basket from becoming full and/or overflowing. This performance standard is designed to motivate the Contractor to provide service adequate to prevent overflow and subsequent public littering. Monitors will look for and solicit reports from citizens of full or overflowing Litter Baskets.

### **Service Hours (2.3.9) --**

*Litter Baskets shall be emptied at least once daily, seven days per week during the same hours that Manual Street Sweeping occurs on the route where the Litter Basket is located.*

Since Manual Street Sweeping is to be provided between 7:00 a.m. and 7:00 p.m., Litter Basket Service will also take place during this time on six days of the week. Litter Basket Service may be performed at any time on Fridays. Monitoring hours should be varied occasionally to allow observation of work done in all hours within the service period.

The Monitor's evaluation of compliance is required for subsequent evaluation of compliance with two performance standards associated with this specification; reliability and effectiveness. Reliability is based on a measure of the number of times that a Litter Basket is not emptied at least once per day. Although Monitors cannot observe every Litter Basket every day, they can set up and check "test" baskets in a way that will prove whether it was emptied daily. More importantly, the "effectiveness" standard 0009 Tc-0n a measure of the number of times that a Litter Basket is observed or reported to be "overflowing". Thus, Monitors will need to look for and document overflow Litter Baskets.

**Litter Basket Service - General (3.2.1)** -- *The Contractor shall procure, deliver, install, empty and maintain freestanding (fixed to ground) and pole mounted Litter Baskets that shall be high quality, standard manufactured units that are durable, attractive, structurally sound, and vandal resistant. Litter Baskets shall be installed at intervals not to exceed fifty (50) meters and at each corner of all intersections along both sides of all streets designated by the GOC.*

The Compliance Analysts-Collection & Cleaning will determine if the Litter Baskets specified in the Final Work Plan meet the technical specifications (3.2.2). The Analysts will determine if the Contractor's Final Work Plan for Litter Basket locations complies with this specification.

**Distribution Schedule (3.2.3)** -- *The Contractor shall deliver and install the total requested number of Litter Baskets On a ph Tc-1n 9 Tis as follows:*

- *Twenty-five (25.0) percent of the total number specified in the RFT not more than ten (10) days prior to the start of the Operations Period.*

- *Fifty (50) percent of the total number specified in the RFT no later than six (6) months from the first day of the Operations Period..*
- *One-hundred (100) percent of the total number specified in the RFT no later than nine (9) months from the first day of the Operations Period.*

*The Contractor shall distribute and service additional Litter Baskets or retrieve existing Litter Baskets upon written request from the GOC Project Administrator.*

Monitors will evaluate Contractor compliance with the distribution schedule during the Preparation Period. They will confirm that no Litter Baskets are installed in their area prior to 10 days before the service start date. Monitors will be provided with a copy of the Contractor's distribution schedule and will inspect each installation in their monitoring area no later than five days before service starts to determine if each Litter Basket has been installed as specified in paragraph (3.2.1).

**Maintenance of Litter Baskets (3.2.4)** -- *The Contractor shall be responsible for monitoring, controlling, washing, sterilizing and otherwise maintaining Litter Baskets to ensure their preservation and long useful life. The Contractor's Final Work Plan shall include provisions for washing/sterilizing Litter Baskets at least four (4) times annually and describe the program for compliance with this specification.*

Monitors will observe Litter Baskets on their routes to determine if aesthetic and functional performance standards are being maintained.

Monitors will verify if Litter Baskets are washed and sanitized at least four times annually and in accordance with the program described in the Final Work Plan by making field observations in areas where the Contractor has scheduled this work.

**Contractor Care of Litter Baskets (3.2.5)** -- *Contractor's employees shall take care to prevent damage to Litter Baskets by unnecessary rough treatment. The Contractor at the Contractor's expense shall replace any Litter Basket damaged by the Contractor, within two (2) workdays at no cost.*

Monitors will observe Contractor work crews as they service and empty Litter Baskets to detect any unnecessary rough treatment. Monitors will record the time, location and offending employee identification number whenever rough treatment is observed, and report the need for Litter Basket replacement if the Basket is no longer functional.

**Repair of Litter Baskets (3.2.6)** -- *The Contractor shall be responsible for repair of Litter Baskets in areas to include, but not be limited to, hinged hoods, liners and mounting hardware. Within two (2.0) workdays of notification by the GOC of the need for such repairs, the Contractor shall repair the Litter Basket, or if necessary, remove the Litter Basket for repairs, and deliver a replacement to the same location.*

Monitors will also observe the condition of Litter Basket hinged hoods, liners and mounting hardware to detect any need for repair or replacement. If the Monitor decides that repair is needed, he/she will record the Litter Basket location, identification number and condition on a special Litter Basket Repair/Replacement Form. The Form will be turned in to the District Data Specialist who will notify the Contractor via fax of the request for Litter Basket repair

or replacement. The Contractor will notify the District Office of the resolution of the request, and the Monitor will then verify the action taken on the next day in the area.

**Replacement of Litter Baskets (3.2.7)** -- *Upon notification to the Contractor by the GOC Project Administrator that a Litter Basket has been removed, stolen or damaged beyond repair through no fault of the Contractor, the Contractor shall deliver a replacement Litter Basket within two (2.0) workdays.*

Monitors will also observe Litter Baskets locations to detect any missing or damaged Baskets requiring replacement. When needed, the Monitor will record the Litter Basket location, identification number and condition on a special Cart Repair/Replacement Form. The Form will be turned in to the District Data Specialist who will notify the Contractor via fax of the request for Litter Basket replacement. The Contractor will notify the District office of the resolution of the request, and the Monitor will then be asked to verify the action taken.

**Monitoring of Public Structures Washing**

Monitoring of Public Structures Washing will consist of evaluating Contractor compliance with General Service Requirements addressed earlier, as well as the directly related specifications covered below. Monitors will be required to closely observe and evaluate Contractor compliance with specifications that address the following:

- Description of Service
- Public Structure Washing Procedures
- Public Structure Washing Equipment and Supplies

**Description of Service (2.2.6) --**

*The Contractor shall mechanically wash all Public Structures contained in the public right-of-way of Primary and Secondary Streets. Public Structures including:*

- *Fountains.*
- *Bridges- including abutments, columns, curbstone, guard rails.*
- *Tunnels.*
- *Bus Stations.*
- *Tram Stations.*
- *Elevated Roadways and Pedestrian Crosswalks.*
- *Traffic Lights.*
- *Street Light Poles and Lamps.*
- *Street Signs.*
- *Traffic Control Signs.*

- *Advertising Signs- (located in the public right-of way).*
- *Traffic Control Shelters.*

The Contractor must meet Performance Standards for Public Structure Washing Service Reliability and Effectiveness. Reliability is a measure of the percentage of all Public Structures that are not serviced according to the schedule submitted in the Final Work Plan. Thus, for evaluation of compliance with the Performance Standard for Public Structure Washing Service Reliability, Monitors must seek to identify and document the number of Public Structures that have not been washed on schedule. To do so, Monitors will use public Structure Washing Route Maps and Schedules supplied by the Contractor for their assigned area that day to follow behind the Washing Service crew and look for missed service.

Public Structure Washing Effectiveness will be measured as the percentage of times that washing techniques are not precisely followed. To monitor for compliance with the standard, Monitors will have to integrate observation of Public Structure Washing operations to the extent practically possible into their daily monitoring when Public Structures are scheduled for washing.

### **Public Structures Washing Procedures --**

The RFT contains specifications relating to washing procedures to achieve GOC performance goals and ensure the protection of public health and safety and the surrounding environment. Specifications address the following issues:

- Service Frequency
- Traffic Control
- Washing
- Wash Water Management

Monitors will be responsible for evaluating Contractor compliance with the specifications for each of the above Public Structure Washing procedural issues. In view of the relative infrequency, but high visibility of this service, monitoring schedules should be adjusted by the District Manager to allow Monitors to be present during washing of all Public Structures in their assigned areas.

**Service Frequency (2.12.1)** -- *The Contractor shall wash fountains, bus stations and tram stations, and bridge guard rails once weekly. All other Public Structures listed in Annex A, Appendix 7 shall be washed once every three (3) months.*

Monitors will evaluate Contractor compliance by comparing actual washing frequency with the specification. The Contractor will provide washing routes and schedules to the GOC to facilitate the on site presence of Monitors to the extent practically possible

**Traffic Control (2.12.2)** -- *The Contractor shall provide personnel to control and direct vehicular and pedestrian traffic flow during all times that work is being performed on Primary and Secondary Streets.*

Compliance with this specification will require that the Contractor assign at least one person to control and direct vehicular and pedestrian traffic in every case where washing personnel or equipment occupy or impact movement on any portion of a Primary or Secondary Street.

**Washing (2.12.3)** -- *Washing shall consist of washing with a cleaning detergent and rinsing. The Contractor shall deploy manpower and all specialized equipment in a manner, and for a length of time that will result in the removal of all dirt, soil, graffiti, grease and any other residuals.*

Monitors will evaluate compliance with this specification by observing and making a rational judgment that washing has resulted in “the removal of all dirt, soil, graffiti, grease and any other material.”

**Wash Water Management (2.12.4)** -- *The Contractor shall control and remove wash and rinse water to prevent damage to surrounding vegetation and accumulation of any pools of freestanding water.*

Compliance with this specification will require Monitor verification that the management mechanisms employed by the Contractor have accomplished vegetation protection and water removal goals.

### **Public Structures Washing Equipment and Supplies --**

The RFT contains specifications relating to washing equipment and supplies to achieve GOC performance goals and ensure the protection of public health and safety and the surrounding environment. Specifications address the following issues:

- Washing Equipment Technical Specifications
- Cleaning Solution Technical Specifications

**Washing Equipment Technical Specifications (3.5.1)** -- *The Contractor shall use hot water high pressure washing equipment for cleaning all Public Structures that meets or exceeds the following Minimum Technical Specifications:*

- *Truck mounted to facilitate access to all Public Structures using crane or boom for operator.*
- *Water pressure at the sprayer tip of 1500 psi.*
- *Water temperature of at least 80 degrees C.*
- *Water flow of at least 20 liters per minute.*

The Compliance Analysts-Collection and Cleaning (with assistance from the Engineers-Collection and Cleaning) will evaluate compliance by comparing the technical specifications of the washing equipment proposed in the Final Work Plan with this specification. During the Operation Period, Monitors will evaluate ongoing compliance by observing washing activities throughout the Contract Period and verifying that the washing equipment being used matches the equipment proposed in the Final Work Plan.

**Cleaning Solution Technical Specifications (3.5.2)** -- *The Contractor shall only use cleaning solutions that do not harm the finish of any Public Structure, meet or exceed the following Minimum Technical Specifications and are approved by the GOC Project Administrator:*

- *Water-soluble and non-ionic*
- *Non-corrosive*
- *Non-foaming*

The Compliance Analysts-Collection and Cleaning (with assistance from the Engineers-Collection & Cleaning) will evaluate compliance by comparing the technical specifications of the cleaning solution(s) proposed in the Final Work Plan with this specification. During the Operation Period, Monitors will evaluate ongoing compliance by observing washing activities throughout the Contract Period and verifying that the cleaning solution(s) being used matches the cleaning solution(s) proposed in the Final Work Plan and approved by the Chief Engineer.



**APPENDIX B**  
**MEDICAL AND INDUSTRIAL MONITOR PROCEDURES MANUAL**

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# **MEDICAL AND INDUSTRIAL MONITOR PROCEDURES MANUAL**

## **INTRODUCTION**

This Appendix describes the procedures that Medical and Industrial Monitors (Monitors) will follow in evaluating Contractor compliance with each of the Service Specifications and Minimum Technical Requirements in Annex A. It also addresses how Monitors will observe, promote, and motivate Customer observance of Egyptian Environmental Law and Governorate of Cairo (GOC) decrees and ordinances relating to medical and industrial waste handling.

Medical and Industrial Waste Collection Monitors will be responsible for monitoring Customer use and Contractor provision of the following services within specific assigned geographic areas in each District of the Southern Zone:

- Medical Waste Collection Service
- Industrial Waste Collection Service

The Monitors will be assigned a fixed number of Industrial Waste Generators (Generators) and Health Care Facilities (HCFs) in their District. The Medical and Industrial Collection Monitors will be inspecting Generators and HCFs in an assigned geographic area. Each Monitor's territory will be divided into six day-routes that he/she will inspect once weekly (working six days per week). The Monitors will visit each facility on their day-route following a prescribed path designed to enable Monitors to inspect facilities after the Contractor has provided services for that day.

The Medical and Industrial Collection Monitors must know all aspects of the Contractor's Final Work Plans for Industrial and Medical Waste Collection. They must also know each of the Service Specifications and Minimum Technical Requirements for these same services.

In general, Monitors' activities will include the following:

- Observing and evaluating Medical and Industrial Waste Collection services.
- Monitoring distribution and condition of Medical Waste Containers and Industrial Waste Bins.
- Monitoring waste collection practices and Contractor's personnel.
- Recording and following up on Possible Violations issues.
- Completing daily inspection forms:
  - Medical and Industrial Daily Inspection Form.
  - Container and Bin Distribution Form.
  - Container and Bin Repair/Replacement Form.

- Assisting Customers in resolving Complaints.
- Providing Public Outreach.

Detailed descriptions of procedures to be followed by Monitors in evaluating Contractor compliance with contract terms are provided in subsequent sections addressing Medical Waste Collection and Industrial Waste Collection. Each Specific Service Specifications and Minimum Technical Requirements that the Monitors are responsible for evaluating Contractor compliance with is cited using the appropriate RFT reference in parentheses, e.g. (2.1.4). Text that is quoted directly from the RFT is in *italics*.

## **MONITORING INFECTIOUS MEDICAL WASTE COLLECTION SERVICES**

The overall objective of monitoring Medical Waste Collection Services will be to optimize the compliance of the Contractor with contract terms and of Health Care Facilities (HCFs) with medical waste handling regulations. To facilitate Monitor understanding and interpretation, the Service Specifications and Minimum Technical Requirements have been grouped into the following eleven categories:

- General Description of Services
- Reporting
- Waste Collection Frequency and Timing.
- Waste Collection Practices.
- Types of Waste to be Included.
- Addition of New Customers.
- Customer Service and Complaint Handling.
- Waste Collection Personnel.
- Waste Collection Equipment
- Tracking Waste Receipt, Transport, Weighing and Disposal
- General Compliance with Solid Waste Laws and Decrees.

Separate sections for each category are provided below describing suggested monitoring procedures for evaluating Contractor compliance with each Service Specifications and Minimum Technical Requirement.

### **General Description of Services**

*Medical Waste services provided by the Contractor shall include the following:*

- *Develop, design, implement, and operate an SZ-wide Infectious Medical Waste management program.*
- *Collect all Infectious Medical Waste from within the SZ.*
- *Design, construct, and operate an Medical Waste Treatment Facility (ies).*

- *Transport Treated Medical Waste Residue to a GOC-Designated Disposal Facility.*
- *Design, implement, and operate an Infectious Medical Waste “source to disposal” tracking system for Infectious Medical Waste collected in the SZ.*

The Medical and Industrial Monitors are only responsible for monitoring Contract terms related to collection of Infectious Medical Wastes. Services related to the Infectious Medical Waste Treatment Facility are handled by the Fixed Facility Monitors.

The Contractor must meet Performance Standards for Quality and Reliability (4.2.1). Reliability is measured by the number of times that any HCF is not serviced according to the agreed upon schedule. Thus, for evaluation of compliance with the Performance Standard for Infectious Medical Waste Collection Service Reliability, Monitors will use the following procedures to determine compliance with Collection Frequency (2.8.3).

- The Monitor will inspect HCFs on his/her daily route after the scheduled collection time to observe if each HCF has been serviced. The Monitor will meet with HCF personnel and inspect the signed receipt that the Contractor must provide for each collection, as required in paragraph (3.2.1).
- Since the Contractor may service HCFs at any time of day, (see Hours and Days of Operation), a Violation cannot be verified unless the Monitor inquires to determine if any waste found at the HCF was placed in the storage Containers after the scheduled time of collection.

Incomplete Collections are used to measure Infectious Medical Waste Collection Service Quality. An Incomplete Collection is defined as follows:

*Collection from any type of Customer where the Contractor leaves residual Infectious Medical Wastes or spillage without leaving a Non-Collection Notice that specifies the reason for leaving the materials.*

If a HCF does not comply with waste setout and/or container specifications contained in paragraphs (3.1.3), (3.1.4) and (3.2.2), the Contractor is not required to provide collection service, but instead must affix a Non-Collection Notice on the Container explaining why collection service was not provided. Prior to the end of each workday the Contractor must notify the GOC Solid Waste Contract Administrator of the location and reason for each Non-Collection Notice left that day. The Contractor is subject to penalties for failure to leave Non-Collection Notices also. Thus, for evaluation of compliance with the Performance Standard for Quality, Monitors must seek to identify an Incomplete Collection, i.e. whenever service has been provided, but some Infectious Medical Waste or spillage is left without a Non-Collection Notice.

### **Reporting**

The Contractor is required to submit reports at various stages of the ten-year term of the Contract. Although not having primary responsibility for evaluating Contractor compliance with most reporting requirements, Monitors may be called upon to provide valuable input to

the Medical and Industrial Waste Collection Department (the Department). Monitors should therefore be intimately familiar with the following specifications that address the required content of each report:

- Final Work Plan (2.2)
- Preparation Work Plan (2.3)
- Route Maps and Schedules (2.1.2)
- Monthly Preparation Reports (2.20.2)
- Monthly Operations Reports (2.20.3)
- Annual Operations Reports (2.20.4)

### **Collection Frequency and Timing**

Paragraphs (2.6) and (2.9.3) provide service specifications relating to the frequency and timing of Infectious Medical Waste Collection Services.

### **Hours and Days of Operation (2.6) --**

*Infectious Medical Waste collection, treatment, and disposal services may occur at any hour of the day, providing that the activities can be performed without causing public disturbances, nuisances, or safety hazards deemed unacceptable by the GOC. All Treatment Facility(s) shall be open for operations a minimum of 6 days per week.*

Monitors will be provided with the scheduled collection times in order to coordinate their monitoring to determine if collection occurs as scheduled while meeting the criteria for acceptable timing.

### **Frequency (2.9.3) --**

*The Contractor shall perform Infectious Medical Waste collection services a minimum of 6 days a week and shall collect Infectious Medical Waste from all HCFs at least an every other day basis.*

Monitors will be evaluating compliance with collection frequency that has been agreed upon between the Contractor and each HCF. The frequency must be at least every other day and enough to prevent the overflow of Containers provided to the HCF. Thus, Monitors will be required to compare actual service frequency with the agreed upon frequency (from lists that they will be supplied) **and** ascertain if the frequency is enough to prevent overflow.

The Monitor will inspect HCFs on his/her daily route after the scheduled collection time to observe if each HCF has been serviced as scheduled on that day. Since the Contractor may service HCFs at any time of day, (see Hours and Days of Operation), a Violation cannot be verified unless the Monitor inquires to determine if any waste that the Monitor sees in the storage Containers was placed there before the scheduled time of collection.

## **Waste Collection Practices**

Collection practice specifications are included to ensure that the Contractor conducts all collection activities not only in compliance with the service specifications, but also in a manner that does not negatively impact Customers or the general public. Service specifications are included relating to the following collection practice issues:

- Public Disturbance, Nuisance, and Safety Hazards
- Scavenging
- Property Damage
- Noise
- Street Usage Rights
- Compliance with Local Ordinances
- Spillage
- Infectious Medical Waste Placement
- Public Diplomacy

Each specification and the corresponding monitoring procedure are described below.

### **Public Disturbance, Nuisance and Safety Hazards (2.7) --**

*The Contractor shall take all reasonable actions to minimize off-site disturbances, nuisances, and public safety hazards during performance of all Infectious Medical Waste Services.*

Monitors will observe the operation of Contractor waste collection vehicles and personnel performing services to spot *disturbance or nuisance* activities such as blocking access to buildings or vehicular and pedestrian traffic. On any such occasion the Monitor will record the vehicle identification number, the identification number of any personnel involved, the date, time and location, and a full description of the alleged occurrence.

Monitors will observe collection crews and vehicles to ascertain if adequate safety precautions are being taken. Any activity the Monitor deems to be a potential threat to the safety of HCF employees or the general public should be recorded on the Daily Inspection Form and reported. The Monitor will record the vehicle identification number, the date and time, and the exact location of the alleged incident.

### **Scavenging (2.8) --**

*The Contractor shall forbid all employees and sub-Contractors, and shall prevent all others from scavenging any component of the Infectious Medical Waste.*

Scavenging of materials from Infectious Medical Waste reduces collection productivity and endangers the health and safety of the collection crew. Therefore, a no-tolerance performance standard and a large penalty have been established to discourage scavenging. Monitors will evaluate compliance with this specification by observing collection crew

activities at HCFs and by looking for scavenged materials on the collection vehicle, both inside and out of the cab.

If scavenging or scavenged materials are observed, the Monitor will record the vehicle identification number, the identification of the employee caught scavenging, the scavenged material, the time, and the location of the incident.

### **Property Damage (2.10) --**

*The Contractor shall be responsible for all costs associated with the repair and or replacement of damaged property of any kind that is a result of actions of its equipment, employees, or agents. Collection crews shall report any incident causing damage to third-party property to the Contractor's General Manager, who shall in turn inform the GOC within 12 hours of such occurrence.*

While the no tolerance performance standard and associated penalty have been written to motivate self reporting, it will also be incumbent upon Monitors to closely observe HCF buildings, stairways, sidewalks and utility poles that may have been damaged from collection crew activities. If the Monitor sees property damage occur he/she will record the vehicle identification number, the identification numbers of the collection crew members, the date, time and location, and a full description of the property damage.

Through the Public Information Campaign, HCFs will be encouraged to report alleged damage to the Contractor's Customer Service and/or GOC Project Administration Offices, or directly to Monitors.

### **Noise (2.11) --**

The Contractor shall take measures to minimize noise from collection equipment and the activities of collection personnel.

Monitors will observe collection crews and vehicles to ascertain if waste collection services are being performed in a manner that minimizes noise levels. This is especially important at hospitals. Monitors should record and report incidents of unnecessary noise caused in servicing Containers. If the Monitor observes excessive noise, he/she will record the vehicle identification number, the identification numbers of the collection crew members, the date, time and location, and a full description of the cause of the noise.

### **Street Usage Rights (2.12) --**

*The Contractor is granted the right to use the streets for the purpose of providing Infectious Medical Waste Collection services specified in the Contract, but is not granted exclusive use of such streets. When the Contractor's vehicle blocks the passage of other vehicles, the Contractor's vehicle shall pull aside at the first opportunity and allow waiting vehicles to pass.*

When monitoring the work of the collection crews, the Monitor will observe if the collection vehicle is operated in a manner that does not unnecessarily impede or block traffic at or



around HCFs. Upon observation of such an occurrence, the Monitor will record the vehicle identification number, the date and time, and the exact location of the alleged incident.

### **Compliance with Local Ordinances (2.13) --**

*The Contractor shall comply with GOC ordinances relating to obstructing streets, keeping passageways open, and shall obey all other laws and GOC ordinances.*

When observing collection crews the Monitor will ascertain if all crew members perform activities in compliance with all GOC decrees and ordinances, especially those related to Infectious Medical Waste Collection service provision. Monitors will record alleged violations, citing the GOC decree or ordinance that is being violated.

### **Spillage (2.14) --**

*The Contractor shall not be responsible for cleaning up loose waste around any of the Infectious Medical Waste Containers where such loose waste is caused by the carelessness of the Customer. However, the Contractor shall be responsible for removing any spillage that occurs due to the action of Contractor collection equipment and/or personnel. The Contractor shall clean up any such spillage in accordance with the Infectious Medical Waste Environmental Control Plan, and shall report the spillage and cleanup in accordance with the Environmental Control Record.*

Waste spillage may be the result of (a) the Contractors' equipment and/or personnel, or (b) inadequate collection frequency or Container capacity.

Waste may be spilled at several places: at the point of collection in or outside the HCF, along the path that the collector travels between the Containers and the collection vehicle, and at the collection vehicle. When a Monitor observes spilled waste anywhere, he/she must make a fair judgment as to the source of the spill, since it may have been either an HCF employee or the Contractor. As Monitors increase their familiarity with HCF Infectious Medical Waste handling habits and the collection methods used by the Contractor, they will be able to make increasingly accurate determinations of the source of the waste spillage.

If the Monitor observes the Contractor causing spillage, he/she must report the incident and the actions taken, if any, by the Contractor to clean it up in accordance with the Infectious Medical Waste Environmental Control Plan.

### **Infectious Medical Waste Placement (2.15) --**

*The Contractor shall forbid all waste collection crews from placing any Infectious Medical Wastes inside or on the outside of the collection vehicle except in the waste storage area of the vehicle, and shall prevent anyone from scavenging/reclaiming any portion of the waste.*

Improper handling and placement of Infectious Medical Waste by crew members endangers the health and safety of the collection crew and the general public. Therefore, a no tolerance performance standard and a penalty have been established to discourage misplacement or scavenging. Monitors will evaluate compliance with this specification by observing

collection crew activities and by looking for Infectious Medical Waste materials on the collection vehicle, both inside and outside of the cab.

If misplaced or scavenged materials are observed, the Monitor will record the vehicle identification number, the identification of the crew member caught scavenging, the scavenged material, the time, and the location of the incident.

## **Public Diplomacy (2.16) --**

*All waste collection personnel employed by the Contractor shall be provided training adequate to provide Customers with factual information concerning waste collection services and to deal with Customers and the public in a courteous and non-contentious manner.*

HCF support of improved Infectious Waste collection services in the Southern Zone of the GOC will be greatly impacted by how the employees of the Contractor interact with HCF employees. Therefore, the GOC has required that all waste collection personnel employed by the Contractor be trained adequately to provide HCFs with factual information concerning waste collection service and to deal with HCF employees and the general public in a courteous and non-contentious manner.

Monitors will evaluate compliance with this specification by observing collection crew interaction with, and by talking with HCF employees.

## **Types of Waste to Be Included**

To carry out their monitoring duties judiciously, Monitors must have complete knowledge of the types of waste that are considered to be Infectious Medical Wastes and acceptable for inclusion in the wastes that HCFs set out for collection. Infectious Medical Waste is defined as follows:

*Any solid waste generated in the diagnosis, treatment, or immunization of human beings or animals in research pertaining thereto, or in the production or testing of biological materials. Medical/infectious wastes include cultures and stocks, human pathological wastes, human blood and blood products, sharps, animal wastes, isolation wastes, and unused sharps. This term does not include toxic wastes.*

## **Addition of New Health Care Facilities**

*The Contractor shall extend routes and services to any new HCFs within 72 hours of notification from the GOC Project Administrator*

Monitors should be aware that any type of new HCF in the Southern Zone is entitled to Infectious Medical Waste Collection service within 72 hours of notification to the Contractor by the GOC, and should be vigilant for, and report cases where the Contractor fails to provide service as a Possible Violation of this specification.

## **Customer Service and Complaint Handling**

The Contractor is required to offer a means for handling complaints from the GOC and HCFs. To optimize its usage, the system must be widely publicized and easy to use. To ensure the implementation of a system that meets these objectives, service specifications have been included for each of the following related issues:

- Office (2.22.1)
- Customer Service (2.22.2)
- Complaint Records (2.22.3)
- Complaint Reporting (2.22.4)
- Complaint Resolution (2.22.5)
- Unresolved Complaints (2.22.6)

Evaluation of Contractor compliance with paragraphs (2.22.1) through (2.22.4) will be the responsibility of the Compliance Analysts-Medical and Industrial. Therefore, Monitors will not be directly involved in the evaluation of compliance with these specifications. However, when Monitors or Data Specialists call the Customer Service Office with complaints received directly from Customers, they will record as a Violation each instance when their call is not received within three minutes.

### **Complaint Resolution (2.22.5) --**

*The Contractor shall respond to all Customer complaints within 12 hours, Fridays and holidays excluded. If a complaint involves a failure to collect from any Customer as required in the Contract, Contractor shall collect the Infectious Medical Waste in question within 12 hours of notification.*

For each complaint received by the Contractor's Customer Service Office, or reported by Monitors and Data Specialists to the Contractor, the Monitors will follow up by visiting the source of the complaint 12 hours following notification of the Contractor. If the complaint has not been resolved, the Monitors will record it as a Violation.

### **Unresolved Complaints (2.22.6) --**

*In the event that any GOC Project Monitor or Customer reports to the GOC that a complaint has not been resolved to the Customer's satisfaction, the Contractor shall present a detailed report outlining the nature of the complaint and the proposed resolution or actions taken to resolve the complaint. If, in the opinion of the GOC Project Administrator, the proposed resolution or actions taken are insufficient to satisfactorily resolve the claim, the GOC at its reasonable discretion may require Contractor to carry out a process to satisfactorily resolve the complaint.*

The Compliance Analysts may instruct the Monitors to perform spot checks to ensure that the Contractors are in fact resolving each and every complaint. Each month, the Compliance Analysts may randomly select from the Contractors' MOR up to five ostensibly resolved complaints in each Monitor's territory. The Monitors will investigate each resolved

complaint and determine if it was indeed resolved. If it was not resolved, the Monitor shall report it as a Violation of paragraph (2.21.5).

The GOC may also require the Contractor to carry out a process to resolve the complaint. When the Compliance and Penalties Department, as the agent of the GOC Project Administrator, prescribes a complaint resolution that differs from that proposed by the Contractor, the Monitor will follow up to evaluate compliance with the GOC prescribed resolution.

### **Waste Collection/Transport Equipment**

Specifications relating to equipment address Containers for storage and Waste Collection Vehicles for collection/transport of Infectious Medical Wastes.

### **Containers --**

The RFT contains several specifications relating to the types of Containers that are acceptable for storage of Infectious Medical Wastes at HCFs:

- Provision of Containers
- Supply and Delivery
- Technical Specifications for Infectious Medical Waste Containers
- Use of containers
- Handling of Sharps
- Outer Storage Containers

Each of these is discussed below.

#### **Provision of Containers (2.9.2) –**

*The Contractor shall procure, supply, and deliver appropriate collection containers as specified to all HCFs. The HCFs will be responsible for placement of all generated Infectious Medical Wastes in the appropriate containers.*

Monitors will be required to inspect the manner in which Infectious Medical Waste is stored at each HCF that they visit in order to confirm that the Contractor has supplied “appropriate” Containers, i.e. that meet the technical specifications in (3.1.2), and that HCF personnel are placing all Infectious Wastes in them.

#### **Supply and Delivery (3.1.1) –**

*The Contractor is responsible for supply and delivery of all Infectious Medical Waste storage and collection bags, boxes, and containers to all identified HCFs within the SZ.*

Monitors will evaluate compliance with this requirement by asking the person at each HCF responsible for managing Infectious Medical Wastes if they have received and have on hand an adequate supply of Containers.

### **Technical Specifications for Infectious Medical Waste Containers (3.1.2) –**

*All Infectious Medical Waste collection/storage bags, boxes, or other containers shall be procured, distributed, serviced, and maintained by the Contractor. All such boxes, bags, or containers shall meet European Union (EU) standards for Infectious Medical Waste storage, collection, and disposal. In accordance with international standards, the color for all Infectious Medical Waste bags shall be red. All Infectious Medical Waste boxes or other containers shall clearly state that the contents of the box are infectious in nature.*

Monitors will be supplied with European Union (EU) Standards in their basic training. The Contractor must specify in the Final Work Plan that the type of Container that he intends to use meet EU Standards. Monitors will inspect all Containers on hand and in use at each HCF and in the Contractor's collection vehicle to confirm conformance of the Containers with each of the above requirements.

### **Use of Containers (3.1.3) –**

*HCF personnel shall place all Infectious Medical Waste other than Sharps in a plastic bag with sufficient integrity to support a minimum weight of 5 Kg. If empty containers that previously held free liquids are placed into the bag, HCF personnel shall place ½ liter of absorbent material for each ¼ cubic meter, or fraction thereof, of bag volume in the bottom of the bag. Full bags are to be placed by either HCF or Contractor personnel in a rigid container constructed of a material that meets or exceeds the strength of 100 Kg, C-Flute board. If the Infectious Medical Waste contains free liquids in containers, the plastic bag and/or the rigid container shall contain absorbent material sufficient to absorb 15% of the volume of free liquids placed in the bag. The Contractor shall provide the bags, rigid containers, and absorbent material.*

Monitors will inspect the Infectious Medical Waste stored at each HCF that they visit to evaluate HCF and Contractor personnel compliance with each of the detailed steps specified for handling of free liquids and other Infectious Medical Wastes.

### **Handling of Sharps (3.1.4) –**

*HCF personnel shall place all Sharps in puncture resistant containers designed specifically for Sharps. The Contractor shall provide the Sharps containers. Such containers shall not be subjected to compaction. The Contractor shall not collect any Sharps not placed in such containers.*

Monitors will observe and evaluate the manner in which Sharps are handled to confirm that the Contractor is supplying appropriate Sharps containers and that HCF personnel are using them for all Sharps. Monitors will also inspect the Sharps collection process used in the HCF and by the Contractor to ensure that Sharps containers are being collected separately and that containers are not being compacted.

### **Outer Storage Containers (3.1.5) –**

*The outer container shall be conspicuously marked with a warning legend that shall appear in Arabic and English, along with the international symbol for bio-hazardous material. The*

*warning must appear on the sides of the container, twice in Arabic and twice in English. The wording of the warning legend shall be as follows: "CAUTION, contains Infectious Medical Waste which may be bio-hazardous". The Contractor shall affix to each container a label that contains the name and address of the generator and either the date of shipment or an identification number for the shipment. The printing on labels shall be done in indelible ink with letters at least 1 cm in height.*

Outer storage containers are the rigid containers used to store bags of Infectious Medical Waste at the HCF and in the collection vehicle during transport to the Treatment Facility. Monitors will inspect each container at each HCF and in each collection vehicle that they monitor for compliance with each of the requirements contained in this specification. If they observe a violation, Monitors will record the location, time, and a description of the violation on their Daily Inspection Form. Use of a camera to document the violation may be helpful.

## **Waste Collection Vehicles --**

Paragraph (3.3) specifies Minimum Technical Requirements that ensure that the Contractor utilizes Waste Collection Vehicles that meet the GOC's technical performance, health, safety, environmental and aesthetic criteria. Minimum Technical Requirements relating to Waste Collection Vehicles include the following:

- General – Provision of Dedicated Fleet Inventory (3.3.1)
- Changes in the Collection/Transport Vehicle Fleet (3.3.2)
- Cargo Area of Waste Collection/Transport Vehicles (3.3.3)
- Collection/Transport Vehicle Sanitation (3.3.4)
- Collection/Transport Vehicle Maintenance (3.3.5)
- Daily Collection/Transport Vehicle Inspection (3.3.6)
- Collection/Transport Vehicle Operation (3.3.7)
- Collection/Transport Vehicle Marking and Identification (3.3.8)
- Collection/Transport Vehicle Licensing and Inspection (3.3.9)
- Collection/Transport Vehicle Appearance (3.3.10)
- Ancillary Equipment (3.3.11)
- Collection/Transport Vehicle Storage Location (3.3.12)
- Reserve Equipment (3.3.13)
- Collection/Transport Vehicle Loading (3.3.14)

Medical and Industrial Monitors are only responsible for evaluating Contractor compliance with Minimum Technical Requirements (3.3.3) and (3.3.13). However, Monitors should be completely familiar with each of the Waste Collection Vehicle requirements listed above. Fixed Facility Monitors assigned to Equipment Yards will evaluate compliance with each of the other Minimum Technical Requirements.

### **Cargo Area of Waste Collection Vehicles (3.3.3) –**

*The area of the collection body used for the collected Infectious Medical Waste and Treated Infectious Medical Waste Residue shall be watertight and prohibit spillage of any solids or leakage of any liquid waste materials onto the ground or exterior body of the vehicle. The cargo area shall be locked when the vehicle is in motion, and when waste is present in the*

*area, except during loading or unloading of the waste. All discharge openings shall be securely closed during operation of the vehicle.*

Monitors will observe operating collection vehicles as well as vehicle routes of travel to look for spillage or leakage occurring, or having taken place. Monitors should make a special effort to observe the waste loading and unloading processes, as these are where spillage or leakage is most likely to occur. For each observed occurrence of spillage or leakage the Monitor will record on the Daily Inspection Form the vehicle identification number, time and location of the spillage, and the cause of the spill. Use of a camera to document the source of the leakage may also be helpful.

### **Reserve Equipment (3.3.13) –**

*The Contractor shall have available at all times, reserve equipment which can be put in service within 2 hours of any breakdown so that no interruption in regularly scheduled waste collection occurs. Such reserve equipment shall correspond in size and capacity to the equipment normally used by the Contractor to perform the Infectious Medical Waste Collection Service.*

Monitors will be responsible for identifying and recording any occasion where regularly scheduled collection is interrupted for more than two hours due to lack of reserve equipment. The Monitor will record on the Daily Inspection Form the Contractor's designated route number, the cause of the service interruption, the estimated time that the service interruption started, when service was resumed, and the time that the route was finished.

### **Tracking Receipt, Transport, Weighing and Disposal**

Monitoring of Infectious Medical Waste Collection Service includes oversight of the entire handling process including tracking from collection, through treatment, and to disposal. The Contractor must comply with several specifications relating to the handling of Infectious Medical Wastes between these points. Although the Monitors will not be responsible for evaluating compliance with the steps following collection and transport, it is important that they be intimately familiar with the tracking system and work closely with Fixed Facility Monitors to ensure its integrity.

### **Receipt Documentation (3.2.1) --**

*The Contractor shall furnish each HCF with a signed receipt for each shipment at the time of collection of the waste. The receipt shall identify the generator by name and address, and shall list the amount of waste collected, the shipment number, and the date of collection.*

Monitors will inspect records in conjunction with the visit to each HCF to ascertain if the Contractor has left a receipt for all Infectious Medical Wastes collected.

### **Transport of Materials (2.17.6) --**

*The Contractor shall comply with all applicable requirements of this Appendix when transporting Infectious Medical Wastes and Treated Infectious Medical Waste Residue.*

At least twice each week, Monitors will inspect Infectious Medical Waste Collection Vehicles in transit on the collection route and on the way to the Treatment Facility to ensure that the Contractor is complying with all requirements.

### **Transfer of Shipments of Infectious Medical Waste (3.3.15) --**

*Packages of Infectious Medical Waste shall not be transferred between vehicles unless the transfer occurs at and on the premises of a GOC Designated Facility except as provided below:*

#### **Transport Vehicle Malfunction (3.3.15.1) –**

*In case of transport vehicle malfunction, the waste shipment may be transferred to an operational vehicle and the GOC shall be notified of the incident in writing within 5 working days. The incident report shall list all vehicles involved in transporting the Infectious Medical Waste and the cause, if known, of the vehicle malfunction.*

#### **Transport Vehicle Accident (3.3.15.2) –**

*In case of a traffic accident, the waste shipment may be transferred to an operating vehicle if necessary. Any containers of waste that were damaged in the accident shall be repackaged as soon as possible. The nearest GOC shall be notified of the incident no later than the end of the next working day. The incident report shall list all vehicles involved in transporting the Infectious Medical Waste.*

Monitors must be vigilant to ensure that no Infectious Medical Waste is transferred except under the circumstances specified in (3.3.15.1) and (3.3.15.2). The Compliance Analyst-Fixed Facilities will have primary responsibility for assessing compliance with this requirement, based on periodic inspection of the Contractor's source-to-disposal tracking system.

#### **Waste Collection Personnel**

To ensure that the Contractor trains and deploys waste collection personnel in a manner that meets the GOC's technical performance, health, safety, environmental and aesthetic criteria, the RFT contains Minimum Technical Requirements that address each of the following personnel related concerns:

- Competence and Skills
- Dismissal Authority
- Facility Management
- Demeanor
- Uniforms
- Fees and Gratuities
- Worker health and safety

Each of the requirements and the proposed monitoring procedure is described below.



### **Competence and Skills (3.6.1) --**

*All Contractor's and its Sub-contractor's personnel shall be competent and careful workers, specifically trained and skilled in their respective trades.*

The Compliance Analysts-Medical and Industrial will be responsible for evaluating Contractor compliance with this Minimum Technical Requirement. Their evaluation will be based upon review of the list of management level personnel submitted with the Final Work Plan.

### **Dismissal Authority (3.6.2) --**

*The GOC Project Administrator may demand the dismissal of any person employed by the Contractor or its Sub-contractors who repeatedly misconducts, or is incompetent or negligent in the proper performance of his/her duties, or refuses to comply with the directions given. Any person so dismissed shall not be re-employed under the Contract without the written consent of the Contract Administrator.*

Monitors will observe waste collection personnel and solicit feedback from HCFs to identify extreme cases of personnel behavior or performance that warrant GOC use of its dismissal authority. Monitors will record any such observations on their Daily Inspection Form, noting the location, time, and a description of the incident.

### **Facility Management (3.6.3) --**

*The Contractor shall assign a qualified facility manager for each facility, as well as the collection fleet, and shall provide the name of that person in writing to the Contract Administrator.*

The Compliance Analysts-Medical and Industrial will review the Final Work Plan for Medical Waste Collection Services to determine if qualified Field Supervisors have been assigned for each type of service.

The Monitors will evaluate compliance with the requirement every day by verifying that a Field Supervisor is on duty to supervise the collection crew(s) in their work area. The Monitors shall communicate directly with the Field Supervisor once per day either in person or via radio/mobile and verify that the Field Supervisor has radio contact with the crews and Customer Service Office.

### **Demeanor (3.6.4) --**

*The Contractor shall require all employees to conduct themselves in a courteous and helpful manner and refrain from using any loud or profane language.*

Monitors will evaluate compliance with this requirement by direct observation of crew conversation to detect any use of loud or profane language and also solicit feedback from HCF personnel concerning their interaction with Contractor employees.

### **Uniforms (3.6.5) --**

*The Contractor shall provide all employees with adequate uniforms, hats, gloves, work boots, reflective vests and other protective clothing as necessary to maintain their appearance and safety. Uniforms and safety gear are subject to review and approval by the GOC.*

Monitors will check to see if every employee that they encounter is in uniform and is equipped with a hat, gloves, boots, reflective vest and other necessary protective clothing. If any of these items are missing the Monitor will record on the Daily Inspection Form the time and location of the observance and the identification number of the improperly dressed employee.

### **Fees and Gratuities (3.6.6) --**

*The Contractor shall not permit any employee, agent or subcontractor to offer special service beyond the scope of this Contract, or to request, solicit, demand, or accept, either directly or indirectly, any compensation or gratuity for services that fall within the scope of this Contract.*

Monitors will evaluate compliance with this requirement by direct observation of crew interaction with HCF personnel, and by occasionally asking HCF personnel if they are aware of any solicitation of fees or gratuities for services outside the Contract. If a Monitor finds an employee violating this requirement, he/she will record the time, location, nature of violation, and employee identification on the Daily Inspection Form.

### **Worker Health, Safety and Emergency Response (3.7.7.1) --**

*All Contractor and Sub-Contractor personnel shall be provided with a Health and Safety and Emergency Response Manual that provides instructions for protecting worker health and safety and responding to foreseeable emergencies including fire, medical emergency, vehicle accident, and environmental hazards. All Contractor personnel shall receive annual training in health, safety, and emergency response procedures.*

While evaluation of compliance with the training requirement will be largely the responsibility of the Fixed Facility Monitors, nevertheless, Monitors should occasionally inspect collection/transport vehicles to see if an Emergency Response Manual is present.

### **General Compliance with Solid Waste Laws and Ordinances**

Monitors will be responsible for evaluating Contractor and general public compliance with existing GOC Decrees and Egyptian Laws that relate to the handling and disposal of Infectious Medical Waste.

New Governorate Decrees will likely be promulgated prior to the start of the Contract Period that may extensively amend or rescind some of the existing Decrees listed above. In any event, intimate knowledge of the content and interpretation of all Decrees relating to solid waste management will be a prerequisite for monitoring, and thus will be covered in detail in Monitor training.

## **MONITORING INDUSTRIAL WASTE COLLECTION SERVICES**

The overall objective of monitoring Industrial Waste Collection Services will be to optimize Contractor compliance with contract terms as well as Customer compliance with National Environmental Laws and GOC decrees and ordinances related to Industrial Waste. To facilitate Monitor understanding and interpretation, the Service Specifications and Minimum Technical Requirements have been grouped and will be discussed in the following eleven categories:

- General Description of Service
- Type of Waste to be Included
- Ownership of Waste
- Reporting
- Waste Collection Frequency and Timing
- Waste Collection Practices
- Addition of New Customers
- Customer Service and Complaint Handling
- Waste Collection Equipment
- Waste Collection Personnel
- General Compliance with Solid Waste Laws and Decrees

### **General Description of Service**

*The Contractor shall procure, distribute, service (empty contents), and maintain Industrial Waste Bins with volume sufficient to contain the total volume of solid waste generated by each Industrial Waste Generator in the time period between servicing (emptying).*

The Contractor must meet Performance Standards for Quality (4.3.1) and Reliability (4.3.2). Reliability is measured by the number of times that any Industrial Waste Bin (Bin) is not serviced according to the agreed upon schedule.

Thus, for evaluation of compliance with the Performance Standard for Industrial Waste Collection Service Reliability, Monitors will use the following procedures to determine compliance with Collection Frequency (2.2.2).

- The Monitor will inspect Generators on his/her daily route after the scheduled collection time to observe if the Bin(s) have been serviced.
- Since the Contractor may service Generators at any time of day (see Hours of Collection), a Violation cannot be verified unless the Monitor determines that waste observed in the Bin was set out after the scheduled time of collection.

Failure to dump the Entire Contents or failure to pick up any spillage is used to measure Industrial Waste Collection Service Quality. The Entire Contents is defined as follows:

*All of the MSW or Industrial Waste in a Bin that is loose and will transfer by gravity into the hopper of a Waste Collection Vehicle.*

If a Generator does not comply with Bin usage specifications contained in paragraph (3.2.1),

the Contractor must affix a Non-Collection Notice (see paragraph (3.2.2)) on the container explaining why collection service was not provided. Prior to the end of each workday the Contractor must notify the GOC of the location and reason for each Non-Collection Notice left that day. The Contractor is subject to penalties for failure to leave Non-Collection Notices.

Thus, for evaluation of compliance with the Performance Standard for Quality, Monitors will seek to identify whenever service has been provided, but some Industrial Waste has been left in or around the Bin without a Non-Collection Notice stating why.

### **Types of Waste to Be Included**

To carry out their monitoring duties judiciously, Monitors must have complete knowledge of the types of solid waste that are acceptable for inclusion in the Industrial Wastes that Generators set out for collection. Types of waste to be included are addressed in the definition of Industrial Waste:

*Solid wastes, including industrial process wastes, generated from Industrial Waste Generators. It does not include cement kiln residues, sludges, liquids, hazardous wastes, radioactive wastes, Medical Wastes, agricultural wastes, or Construction and Demolition Wastes.*

### **Ownership of Waste**

It is important that Monitors and Industrial Waste Generators are aware of the GOC policy regarding Industrial Waste ownership in order to help minimize disputes that are concerned with the issue of ownership. The policy is made clear in the following service specification:

#### **Ownership of Waste (2.1.3) –**

*At any time after the Industrial Waste has been set out for collection by the Industrial Waste Generator, such waste shall become the property of the Contractor, except that the Industrial Waste Generator, and only the Industrial Waste Generator, may take back the waste until such waste materials have been collected by the Contractor, at which time they shall become the sole and exclusive property of the Contractor.*

The policy adopted through this specification precludes any person other than the Contractor from removing and taking ownership of the waste. This is meant to preclude scavenging by third parties, who might remove materials that the Contractor could use to meet the 20 percent Industrial Waste Diversion requirement, and thus it is extremely important for Monitors to enforce this policy. Moreover, once the waste is collected, ownership changes hands to the Contractor, and thus Generators are relieved of any potential liability that might result from improper handling and disposal.

### **Reporting**

The Contractor is required to submit the following reports at various stages of the ten-year term of the Contract:

- Final Work Plan (2.1.2)

- Preparation Work Plan (2.1.2)
- Monthly Preparation Reports (2.5.1)
- Monthly Operations Reports (2.5.2)
- Annual Operations Reports (2.5.3)

Although not having primary responsibility for evaluating Contractor compliance with most reporting requirements Monitors may be called upon to provide valuable input to the Medical and Industrial Department (the Department). Monitors should therefore be intimately familiar with the above specifications that address the required content of each report.

### **Waste Collection Frequency and Timing**

Paragraph 2.2 includes service specifications relating to the frequency and timing of Industrial Waste Collection Services. These specifications address the following:

- Collection Frequency (2.2.2)
- Hours of Collection (2.2.3)
- Customer Notification (2.2.4)

#### **Collection Frequency (2.2.2) --**

*The Contractor shall provide, at a minimum, once per week collection service. More frequent collection may be negotiated between the Contractor and any Industrial Waste Generator based on the following criteria:*

- *Prevention of health and safety hazards*
- *Available space considerations*
- *Type and amount of waste generated*
- *Potential impediments to industrial production and procedures*

*The GOC maintains the right to approve final decisions concerning service frequency and scheduling, and Bin size and placement.*

Monitors will be evaluating compliance with collection frequency that has been negotiated between the Contractor and the Generator, and approved by the GOC. The frequency must be enough to prevent the overflow of the Industrial Waste Bin provided to a Generator. Monitors will be provided with schedules that state the collection schedule and frequency for each Customer. Monitors will be required to compare actual service frequency with the agreed upon frequency and be continuously vigilant to ascertain if the frequency is enough to prevent overflow.

#### **Hours of Collection (2.2.3) --**

*The Contractor may provide collection service at any hour of the day subject to the approval of the GOC. The time that Industrial Waste Collection Services are to be provided on each collection route will be reported to the GOC as part of the Final Work Plan.*

Monitors will be provided with the scheduled collection times for each Generator. They will coordinate their monitoring schedule to determine if service is provided according to the scheduled time.

#### **Customer Notification (2.2.4) --**

*Prior to the start of the Operations Period, the Contractor shall provide all Customers with a written collection schedule including day(s) of the week and approximate collection time. The Contractor shall provide Customers with an updated schedule no less than 5 days prior to any change in collection day(s) or collection time.*

During the Preparation Period, Monitors should visit each Generator and confirm that they have been properly notified of collection time and schedule. Monitors should tell each Generator to inform the appropriate District Office if their service schedule is not met or is changed without proper notice.

Monitors will observe collection times at specific Generators and observe collection route itineraries to evaluate compliance with the information submitted by the Contractor. Monitors must use good judgment in assessing the impact of delays beyond the control of the Contractor that change collection time.

#### **Waste Collection Practices**

Paragraph 2.5 specifies collection practices to motivate the Contractor to conduct all collection activities not only in compliance with general service specifications, but also in a manner that does not negatively impact Generators, other Customers, or the general public. The following collection practice issues are addressed:

- Disturbance (2.3.1)
- Property Damage (2.3.2)
- Noise (2.3.3)
- Public Safety and Convenience (2.3.4)
- Spillage (2.3.5)
- Scavenging (2.3.6)
- Compliance with Local Ordinances (2.3.7)

Proposed monitoring procedures to evaluate Contractor compliance with each requirement follow.

#### **Disturbance (2.3.1) --**

*The Contractor shall take all reasonable steps to minimize disturbance to Customers during the performance of all aspects of the Industrial Waste Collection Service.*

Monitors will observe the operation of Industrial Waste Collection Vehicles and activities of collection personnel to spot *disturbance* activities such as blocking access to buildings or vehicular and pedestrian traffic. On any such occasion the Monitor will record the vehicle identification number, the identification number of any personnel involved, the date, time and location, and a full description of the alleged occurrence.

### **Property Damage (2.3.2) --**

*The Contractor shall be responsible for all costs associated with the repair and or replacement of damaged property of any kind that can be ascribed to the actions of its equipment, employees, or agents. Collection crews shall report any incident that might have caused damage to Customer or other third party property to the Field Supervisor, who shall in turn inform the GOC within 24 hours of such occurrence.*

While the no-tolerance performance standard and associated penalty have been written to motivate self reporting, it will also be incumbent upon Monitors to closely observe buildings, pavement and utility poles near the Industrial Waste Bins that could be damaged in the collection process. Monitors will solicit reports for any damage from Generator employees. If the Monitor happens to see property damage occur he/she will record the vehicle identification number, the identification numbers of the collection crew members, the date, time and location, and a full description of the property damage.

Through the Public Information Campaign, the general public will be encouraged to report alleged damage to the Contractor's Customer Service and/or GOC District Offices, or directly to Monitors.

### **Noise (2.3.3) --**

*The Contractor shall take measures to minimize noise from collection equipment and the activities of collection personnel.*

When observing collection crews and vehicles, Monitors will ascertain if waste collection services are being performed in a manner that attempts to minimize noise. Monitors should record and report incidents of unnecessary noise caused in servicing Industrial Waste Bins, and compacting waste. If the Monitor observes excessive noise, he/she will record the vehicle identification number, the identification numbers of the collection crew members, the date, time and location, and a full description of the cause of the noise.

### **Public Safety and Convenience (2.5.4) --**

*The Contractor shall perform his work in a manner that will minimize safety hazards, inconvenience and annoyance to Customers and the general public.*

When observing collection crews and vehicles, Monitors will ascertain if adequate safety precautions are being taken. Any activity the Monitor deems to be a potential threat to the safety of Generator personnel or the general public should be recorded on the Daily Inspection Form and reported. The Monitor will record the vehicle identification number, the date and time, and the exact location of the alleged incident.

### **Spillage (2.3.5) --**

*The Contractor shall not be responsible for cleaning up loose waste around the Industrial Waste Bins where such loose waste is caused by the carelessness of the Customer. However,*

*the Contractor shall be responsible for removing any spillage that occurs due to the actions of Contractor collection equipment and/or personnel.*

Since the public may have access to Industrial Waste Bins twenty-four hours per day, there is a high potential for waste spillage. It is incumbent upon the Monitors to closely monitor Bin sites and work cooperatively with the Contractor and Generator to restrict public access to the Bins and ensure that service frequency is adequate to prevent waste overflow.

When observing an Industrial Waste Bin being serviced by the collection crew, Monitors will watch carefully for any spillage that may occur in the process. Monitors will document any incident where spillage is not picked up. Monitors should also solicit feedback from Generators concerning the Contractor's adherence to this requirement.

### **Scavenging (2.3.6) --**

*The Contractor shall forbid its employees and Sub-Contractors from retrieving or scavenging any waste from the Industrial Generator Waste Bins or Waste Collection Vehicles.*

Due to its homogeneity and potential reuse value, some types of Industrial Waste may encourage scavenging by collection crews. Scavenging of any waste material by employees reduces collection productivity and presents a negative image of the Contractor and his services. Monitors will evaluate compliance with this specification by closely scrutinizing collection crew activities and by looking for scavenged materials on the collection vehicle, both inside and out of the cab.

If scavenging or scavenged materials are observed, the Monitor will record the vehicle identification number, the identification of the employee caught scavenging, the scavenged material, the time, and the location of the incident.

### **Compliance with Local Ordinances (2.3.7) --**

*The Contractor shall comply with all national laws and GOC ordinances including, but not limited to, those relating to: obstructing streets, keeping passageways open, and regulating waste collection and transportation.*

When observing collection crews, the Monitor will ascertain if all crew members perform activities and operate vehicles in compliance with National Laws and GOC decrees and ordinances related to service provision. Monitors will record alleged violations, citing the GOC decree or ordinance that is being violated.

### **Addition of New Customers**

Paragraph (2.6) requires the Contractor to extend services to new Industrial Establishments.

*The Contractor shall extend routes and services promptly upon addition of new Industrial Establishments in the Southern Zone, upon increase in service demand, or upon the request of the GOC Project Administrator.*



Monitors should be aware that new Industrial Establishments that employ more than ten persons are entitled to Industrial Waste Collection service upon the request of the GOC Project Administrator. Monitors should be work to identify new Industrial Establishments on their routes that are eligible.

### **Customer Service and Complaint Handling**

Paragraph (3.4) requires the Contractor to offer a convenient means for handling complaints from Industrial Waste Generators. To ensure the implementation of a system that meets these objectives, service specifications have been included for each of the following related issues:

- Office (3.4.1)
- Staffing and Hours of Operation (3.4.2)
- Telephone Lines (3.4.3)
- Complaint Records (2.7.1)
- Complaint Resolution (2.7.2)
- Unresolved Complaints (2.7.3)

Evaluation of Contractor compliance with specifications (3.4.1) through (3.4.3) and (2.7.1) will be the responsibility of the Compliance Analysts-Medical and Industrial. Monitors will not be directly involved in the evaluation of compliance with these specifications. However, when the Monitors and Data Specialists call the Customer Service Office with complaints received directly from Customers, they will record as a Violation each instance when their call is not received within three minutes.

### **Complaint Resolution (2.7.2) --**

*The Contractor shall respond to all Customer complaints within twelve (12.0) hours, Fridays and holidays excluded. In particular, if a complaint involves a failure to collect from any Customer as required in the Contract, Contractor shall collect the Industrial Waste in question within twelve (12.0) hours of notification, provided it has been prepared for collection in accordance with the requirements set forth in paragraph 3.2.1 herein.*

For each complaint received by the Contractor's Customer Service Office, or reported by Monitors and Data Specialists to the Contractor, the Monitors will follow up by visiting the source of the complaint 12 hours following notification of the Contractor. If the complaint has not been resolved, the Monitors will record it as a Violation.

### **Unresolved Complaints (2.7.3) --**

*In the event that any GOC Contract Monitor or Customer reports to the GOC that a complaint has not been resolved to the Customer's satisfaction, the Contractor shall submit a detailed report outlining the nature of the complaint and the proposed resolution or actions taken to resolve the complaint. If, in the opinion of the GOC Project Administrator, the proposed resolution or actions taken are insufficient to satisfactorily resolve the claim, the GOC at its reasonable discretion may dictate procedures to satisfactorily resolve the complaint.*

The Compliance Analysts may instruct Monitors to perform spot checks to ensure that the Contractors have indeed resolved the complaints. Each month, the Compliance Analysts may randomly select from the Contractors' MOR up to five resolved complaints in each Monitor's territory. The Monitors will investigate each ostensibly resolved complaint and determine if it was indeed resolved. If it was not resolved, the Monitor shall report it as a Violation of paragraph (2.7.2).

The GOC may also require the Contractor to carry out a process to resolve the complaint. When the Compliance and Penalties Department, as the agent of the GOC Project Administrator, prescribes a complaint resolution that differs from that proposed by the Contractor, the Monitor will follow up to evaluate compliance with the GOC prescribed resolution.

### **Waste Collection Equipment and Vehicles**

Specifications relating to equipment address Industrial Waste Bins for storage and Waste Collection Vehicles for collection of Industrial Wastes.

### **Industrial Waste Bin Requirements --**

The specifications contain several requirements relating to the Bins to be used for Industrial Wastes disposal by Industrial Waste Generators. These requirements address:

- Container Integrity (3.1.2)
- Waste Containment (3.1.3)
- Placement and Usage (3.2.1)
- Technical Specifications (3.2.3)
- Warranty (3.2.4)
- Ownership (3.2.5)
- Distribution (3.2.6)
- Maintenance (3.2.7)
- Repair (3.2.8)
- Replacement (3.2.9)

Those requirements in the above list that are monitored by Medical and Industrial Waste monitors are listed below with the suggested monitoring procedure. Requirements not listed below are not the responsibility of Monitors, but Monitors should nevertheless read and understand their purpose.

#### **Container Integrity (3.1.2) –**

*Industrial Waste Bins and the area of Waste Collection Vehicles used to hold Industrial Waste shall be watertight and prohibit spillage of any solids or liquid waste materials onto the ground or exterior body.*

Monitors will inspect Industrial Waste Bins to look for spillage or leakage occurring, or having taken place. Monitors should make a special effort to observe the waste loading and compaction process, as this is when leakage from the bottom of the Bin will be most visible. For each observed occurrence of spillage or leakage the Monitor will record on the Daily

Inspection Form the Industrial Waste Bin identification number, time and location of the spillage, and the type of material that was spilled. Use of a camera to document the type and size of leak in the Bin may also be helpful.

### **Waste Containment (3.1.3) –**

*Prior to transportation all Industrial Wastes in Roll-off Bins must be enclosed and covered.*

It is likely that Contractor use of vehicles without compaction will be limited to Generators that require open Roll-off Bins that are not covered. When the Contractor services an open top Roll-off Bin, the Monitors will have to closely scrutinize their use to motivate adherence to the “enclosed and covered” requirement. Such scrutiny will require that the Monitor frequently schedule his itinerary to be present where a Roll-off Bin is scheduled to be serviced. In the case of non-compliance, the Monitor should record the Bin and vehicle identification number, and the time and location of the incident on the Daily Inspection Form.

### **Placement and Usage (3.2.1) –**

*The Contractor shall provide Industrial Waste Generators with Bins for storage of Industrial Waste. The Industrial Waste Generators and the Contractor shall determine the number, size and location of Bins as prescribed in this article. If the Industrial Waste Generator and Contractor fail to reach a mutual agreement, the GOC Project Administrator will make the decision. Industrial Waste Generators will be responsible for placing Industrial Waste and MSW into Bins provided by the Contractor. The Contractor shall not be required to collect any Industrial Waste or MSW that is not placed in a Bin, provided that the Contractor leaves a Non-Collection Notice.*

Compliance Analysts will evaluate Contractor compliance with the first two requirements in this specification. Medical and Industrial Monitors will evaluate Industrial Waste Generator Compliance with their responsibility to place their wastes in the Bin. Monitors will also evaluate Contractor compliance with the requirement to leave a Non-Collection Notice whenever the collection crew leaves waste that is outside the Bin.

### **Distribution (3.2.6) –**

*The Contractor shall determine the location of Bins in collaboration with the Customer during the Preparation Period. The Contractor shall place Bins no earlier than ten (10) days, and no later than two (2) days prior to commencement of Industrial Waste Collection Service.*

Monitors will be provided with a copy of the Contractor’s Bin distribution schedule. Monitors will evaluate Contractor compliance of the distribution schedule with the allowed distribution period during the Preparation Period. They will confirm that no Bins are delivered to Generators in their area prior to 10 days before the service start date. They will visit each Generator in their monitoring area no later than two days before service starts to determine if each has been provided with the number, size and type of Bins agreed upon between the Contractor and the Generator. Monitors will record the number, type and size of Bin at each Generator on a Bin Distribution Form and submit it to their Data Specialist.

### **Maintenance (3.2.7) –**

*The Contractor shall be responsible for monitoring, controlling, washing, sterilizing and otherwise maintaining Bins to ensure their preservation and long useful life. The Contractor's Final Work Plan shall include provisions for washing/sterilizing Bins at least once every three (3) months and describe the program for compliance with this specification.*

Monitoring of Industrial Waste collection will include evaluation of Contractor compliance with all aspects of this Bin maintenance requirement. Monitors will closely observe the condition of Bins to determine if maintenance is adequate to ensure their, appearance, functionality, and long useful life.

By concentrating field observations in areas where the Contractor is scheduling Bin washing/sterilizing, Monitors will verify if Bins are washed and sanitized at least four times annually and in accordance with the program described in the Final Work Plan.

### **Repair (3.2.8) –**

*Contractor shall be responsible for repair of Bins including lids and hinges, wheels and axles, and all parts essential for the safe and efficient dumping of Industrial Waste stored in the Bin. Within five (5) workdays of notification by the Customer of the need for such repairs, the Contractor shall repair or remove and deliver a replacement.*

When inspecting the condition of Bins, Monitors should endeavor to detect any need for repair or replacement. If repair is needed, the Monitor will record the Bin identification number, location, and justification for repair on a special Bin Repair/Replacement Form. The Form will be turned in to the District Data Specialist and the Contractor will be notified via fax of the request for Bin repair or replacement. The Contractor will notify the District office of the resolution of the request, and the Monitor will then verify that appropriate action is taken within five days.

### **Replacement (3.2.9) –**

*The Contractor at its expense shall replace any Bin damaged by the Contractor, within five (5) workdays at no cost or inconvenience to Customers.*

Monitors will observe Industrial Waste Collection service to witness how collection crews treat Bins when moving and emptying them into the collection vehicle, and will make note of any unnecessary rough treatment caused by the crew or by the dumping process. Monitors will also observe the condition of Bins to detect any need for replacement. If replacement is needed, the Monitor will record the Bin location, identification number, and condition on a special Bin Repair/Replacement Form. The Form will be turned in to the District Data Specialist and the Contractor will be notified via fax of the request for Bin repair or replacement. The Contractor will notify the District office of the resolution of the request, and the Monitor will then be asked to verify the required action was taken.

## **Waste Collection Vehicle Requirements --**

Section (3.1) specifies Minimum Technical Requirements to ensure that the Contractor utilizes Waste Collection Vehicles that meet the GOC's technical performance, health, safety, environmental and aesthetic criteria. Minimum Technical Requirements relating to Waste Collection Vehicles include the following:

- Collection Fleet List (3.1.1)
- Container Integrity (3.1.2)
- Waste Containment (3.1.3)
- Health and Safety (3.1.4)
- Vehicle Markings (3.1.5)
- Vehicle Licensing and Inspection (3.1.6)
- Collection Vehicle Appearance (3.1.7)
- Ancillary Equipment (3.1.8)
- Collection Vehicle Storage Location (3.1.9)
- Reserve Equipment (3.1.10)
- Collection Vehicle Loading (3.1.11)

Monitors are only responsible for evaluating Contractor compliance with Minimum Technical Requirements (3.1.2), (3.1.3), and (3.1.10), but should be completely familiar with all of the Waste Collection Vehicle requirements listed above. Compliance with all other collection vehicle specifications will be evaluated by Fixed Facility Monitors assigned to the equipment yard.

### **Container Integrity (3.1.2) –**

*Industrial Waste Bins and the area of Waste Collection Vehicles used to hold Industrial Waste shall be watertight and prohibit spillage of any solids or liquid waste materials onto the ground or exterior body.*

Monitors will observe Industrial Waste Bins and operating collection vehicles as well as vehicle routes of travel to look for spillage or leakage occurring, or having taken place. Monitors should make a special effort to observe the waste loading and compaction process, as this is where spillage or leakage is most likely to occur. For each observed occurrence of spillage or leakage the Monitor will record on the Daily Inspection Form the vehicle identification number, time and location of the spillage, and the type of material that was spilled. Use of a camera to document the type and size of spill may also be helpful.

### **Waste Containment (3.1.3) –**

*Prior to transportation all Industrial Wastes in Roll-off Bins must be enclosed and covered.*

Monitors will observe collection of Roll-off Bins in order to assess compliance with this requirement. If the Contractor transports Industrial Waste in an un-covered Roll-off Bin, the Monitor will record on the Daily Inspection Form the vehicle identification number, time and

location of the spillage, and the type of material that was spilled. Use of a camera to document the type and size of spill may also be helpful.

### **Reserve Equipment (3.1.10) –**

*The Contractor shall have available at all times, reserve equipment which can be put in service within two (2) hours of any breakdown so that no interruption in regularly scheduled Industrial Waste Collection Service occurs. Such reserve equipment shall correspond in size and capacity to the equipment normally used by the Contractor to perform the Industrial Waste Collection Service.*

Monitors will be responsible for identifying and documenting any occasion where regularly scheduled collection is interrupted for more than two hours due to lack of reserve equipment. The Monitor will record the Contractor's designated route number, the cause of the service interruption, the estimated time that the service interruption started, when service was resumed, and the time that the route was finished.

### **Waste Collection Personnel**

The RFT contains minimum technical requirements to ensure that the Contractor trains and deploys Industrial Waste Collection personnel in a manner that meets the GOC's technical performance, health, safety, environmental and aesthetic criteria. The Medical and Industrial Monitors will play a role in evaluating Contractor compliance with the following:

- Field Supervision (3.3.3)
- Demeanor (3.3.4)
- Uniforms (3.3.5)
- Access to Private Property (3.3.6)
- Fees and Gratuities (3.3.7)

### **Field Supervision (3.3.3) --**

*The Contractor shall assign a qualified Field Supervisor for Industrial Waste Collection Service and shall provide the name of that person in writing to the GOC Project Administrator. The Field Supervisor shall be on duty at all times the crews are working, and have radio communication with the Contractor's office and all Industrial Waste Collection Vehicles under his supervision.*

The Compliance Analysts-Medical and Industrial will review the Final Work Plan to determine if a qualified Field Supervisor has been assigned to oversee Industrial Waste Collection Services

The Monitors will evaluate compliance with the requirement on an on-going basis by verifying that a Field Supervisor is on duty to supervise the collection crew(s) in their work area. The Monitors shall communicate directly with the Field Supervisor once per day either in person or via radio/mobile and verify that the Field Supervisor has radio contact with the crews and Customer Service Office.

### **Demeanor (3.3.4) --**

*The Contractor shall require all employees to conduct themselves in a courteous and helpful manner and refrain from using any loud or profane language.*

Monitors will evaluate compliance with this requirement by direct observation of crew conversation to detect any use of loud or profane language. They will also solicit feedback from Generators concerning collection crew interaction with their employees.

### **Uniforms and Safety Equipment (3.3.5) --**

*The Contractor shall provide all employees with adequate uniforms, hats, gloves, work boots, reflective vests and other protective clothing as necessary to maintain their appearance and safety. Uniforms and safety gear are subject to review and approval by the GOC.*

While observing any Industrial Waste Collection crew in their daily rounds, Monitors will evaluate compliance with this requirement by observing the dress of each crew member. The Monitor will verify if each crew-member is in uniform and is outfitted with a hat, gloves, boots, reflective vest and other necessary protective clothing. If any of these items are missing the Monitor will record on the Daily Inspection Form the time and location of the observance and the identification number of the improperly dressed employee.

### **Access to Private Property (3.3.6) --**

*The Contractor's employees shall not trespass on private property without the consent of the owner.*

Monitors must be vigilant for evidence of personnel trespass on private property other than that of Industrial Waste Generators that they are servicing. This will occur through direct observation and communication with Generators and the general public.

### **Fees and Gratuities (3.3.7) --**

*The Contractor shall not permit any employee or Sub-Contractor to offer any service beyond the scope of this Contract, or to solicit or accept, either directly or indirectly, any compensation or gratuity for services that fall within the scope of this Contract.*

Monitors will evaluate compliance with this requirement by direct observation of crew interaction with Generators, and by occasionally asking Generators if they are aware of any solicitation of fees or gratuities for services outside the Contract. If a Monitor finds an employee violating this requirement, he/she will record the time, location, nature of violation, and employee identification on the Daily Inspection Form.

### **General Compliance with Solid Waste Laws and Ordinances**

Medical and Industrial Monitors will be responsible for evaluating compliance of the Contractor and Generators with all existing and future GOC Decrees and Egyptian Laws that relate to the management of Industrial Waste.

## **Existing Law Pertaining to Collection of Solid Waste --**

While there are a number of National Laws pertaining to solid waste management, Public Cleaning Law No. 38/1967 and its implementing Law, Ministry of Housing Decree No. 134/1968, provide the best guidance for promulgation of Industrial Waste Collection systems that will be in compliance with all national regulations. Monitors should develop a complete understanding of these Laws and assist the EEAA in their promotion and enforcement.

Monitors should note, and be prepared to explain to Customers, that many of the service specifications and minimum technical requirements included in the RFT are based upon the authority granted to the GOC by these two laws and their implementing regulations.

## **GOC Decrees --**

All monitors will be responsible for promoting (and possibly enforcing) general public compliance with the following GOC Governor Decrees:

- Decree 188/1991 Licenses for Disposal of Construction Wastes
- Decree 206/1992 Construction and Demolition Debris Removal/Fee
- Decree 738/1993 Littering of Public Streets by Waste Collection Vehicles
- Decree 388/1994 Payment of Waste Collection Fees by Shops
- Decree 647/1997 Mandatory Waste Collection Service/Payment
- Decree 601/1998 Prohibition of Private Dump Sites
- Decree 4583/1999 Empowerment of CCBA personnel to Enforce environmental Laws

New Governor Decrees likely will be promulgated prior to the start of the Contract Period that may extensively amend or rescind some of the existing Decrees listed above. In any event, intimate knowledge of the content and interpretation of all Decrees relating to solid waste management will be a prerequisite for monitoring, and thus will be covered in detail in Monitor training.



**APPENDIX C**  
**FIXED FACILITY MONITOR PROCEDURES MANUAL**

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# **FIXED FACILITY MONITOR PROCEDURES MANUAL**

## **INTRODUCTION**

The Fixed Facility Monitors will be responsible for monitoring all fixed facilities utilized by the Contractor for providing services in the Southern Zone. Fixed facilities are not confined to a single service, but include the following:

- Processing and transfer facilities.
- Landfills.
- Medical waste treatment facility.
- Equipment maintenance and storage facilities for the following services:
  - Residential and commercial waste collection.
  - Streets and public facility cleaning.
  - Industrial waste collection.
  - Infectious medical waste collection.

This Appendix describes the procedures that Fixed Facility Monitors will follow to evaluate Contractor compliance with the Service Specifications and Minimum Technical Requirements of the Request for Tenders, and to report Contract violations. Monitors will be stationed at all fixed facilities throughout the Southern Zone during all operating hours.

The Contract terms are cited using the RFT reference in parentheses. For example, (3.1.6) refers to Section 3.1.6 of the appropriate technical specification. Text quoted directly from the RFT is in *Italics*.

## **MONITORING DURING THE PREPARATION PERIOD**

During the Preparation Period, Fixed Facility Monitors will be on-site at all fixed facilities. The Contractor will utilize the Preparation Period to complete a number of activities, such as the following:

- Finalize field data collection and analyses.
- Obtain permits for facilities.
- Complete facility design and engineering.
- Order, receive, and mobilize equipment.
- Construct new facilities and/or rehabilitate existing facilities.

The Monitors will work as directed by the Deputy Chief Engineer-Fixed Facilities. They may be called upon by the Deputy Chief Engineer to perform the following:

- Inspect site work, buildings, and equipment to determine if they comply with the contents of the Final Work Plan and/or other Contract terms.
- Monitor Contractor compliance with the time schedules for rehabilitation of existing facilities and construction of new facilities.
- Identify unacceptable construction techniques that may adversely affect facility operations.
- Monitor performance testing of equipment and systems to determine if they meet their design capacity.

In order to be prepared for this work, the Monitors must be familiar with those parts of the Contract and the Contractor's Final Work Plan that deal with Preparation Period activities.

Separate sections listing the items that Monitors must know about each service follow.

### **Processing Services**

The Contract terms for processing and transfer services are located in technical specifications for Landfilling and Processing Services. Monitors must be familiar with the following items as they relate to Preparation Period activities:

- Final Work Plan components:
  - Site plans (2.1.1).
  - Facility design and operation descriptions (2.1.2).
  - Staffing Plan (2.1.3).
- Preparation Work Plan schedules for (2.2.1):
  - Recruiting and training labor and supervisory personnel.
  - Procurement of supplies and equipment.
  - Rehabilitation of old facilities.
  - Construction of any new facilities.
- Facility design features:
  - Material weighing and classification system (2.8.2).
  - Composting Operations (2.10)
  - On-site run-off and leachate (3.7.1).
  - Facility access control (3.7.2).
  - Fuel storage and distribution (3.8.1).
  - Compost facility laboratory (3.8.2).

## **Landfill**

The requirements for Landfilling Services are located in the technical specifications for Landfilling and Processing Services. Monitors must be familiar with the following items as they relate to Preparation Period activities:

- Final Work Plan components:
  - Site plans (2.1.1).
  - Detailed facility design and operation descriptions (2.1.2).
  - Equipment specifications (2.1.3).
- Preparation Work Plan schedules for (1.6):
  - Recruiting and training labor and supervisory personnel.
  - Procurement of supplies and equipment.
  - Construction of facilities.
- Landfill design features:
  - Site layout (3.4.2)
  - Site access road (3.4.3).
  - Scalehouse (3.4.4).
  - Office building (3.4.5).
  - On-site access road (3.4.6).
  - Bottom liner requirements (3.4.8).
  - Side slope liner requirements (3.4.9).
  - Leachate collection system (3.4.10).
  - Leachate treatment (3.4.11)
  - Landfill gas management (3.4.13)
  - Phased landfill construction (3.4.14)
- Landfill construction requirements:
  - Quality control (3.5.2).
  - Access roads and other facilities (3.5.3).
  - On-site utilities (3.5.4).
  - Liner placement quality assurance and quality control (3.5.5).
  - Landfill cover and management plan (3.5.7)

## **Medical Waste Treatment Facility**

The requirements for the Medical Waste Treatment Facility are located in the technical specifications of the RFT. Monitors must be familiar with the following Contract terms that address the Contractor's Preparation Period activities:

- Final Work Plan components:
  - Site plans (2.1.3).

- Facility design and operations descriptions (2.1.4).
- Equipment specifications (2.1.5).
- Preparation Work Plan schedules for (2.2):
  - Recruiting and training labor and supervisory personnel.
  - Procurement of supplies and equipment.
  - Construction of new facilities and/or rehabilitation of old facilities.
- Treatment facility design features:
  - Weighing and classification system (3.4.1).
  - Treatment facility components (3.5.3).
  - On-Site run-off (3.7.1).
  - Facility access control (3.7.3).

### **Equipment Maintenance and Storage Facilities**

There are no separate provisions for equipment maintenance and storage facilities. The facilities will need to comply with the applicable requirements listed above for each service.

### **MONITORING PROCESSING FACILITY OPERATIONS**

Fixed Facility Monitors will be on-site at all processing and transfer facilities during the Operations Period to monitor Contractor compliance with service specifications and minimum technical requirements in the following categories:

- Weighing and classification of materials.
- Waste receiving.
- Materials processing and disposal.
- Waste transport.
- Personnel.
- Environmental control and emergency response.
- Compost facility operations.
- Reporting.

Contract terms and suggested monitoring procedures for each category are provided in the separate sections below.

## **Weighing and Classification of Materials**

Three separate Contract terms describe the Contractor requirements for weighing and classifying materials that enter and exit processing and transfer facilities:

- Weighing and materials classification system.
- Incoming materials record.
- Outgoing materials record.

### **Weighing and Materials Classification System (2.8.2) –**

*The Contractor shall provide and operate a system for classifying, weighing, and recording all MSW and MSW-derived materials (including, but not limited to, MSW, recycled materials, compost, and residuals from recycling and composting activities) and IW.*

### **Incoming Materials Record (3.5.2) –**

*The Contractor shall maintain detailed records of MSW, MSW-derived materials, and IW received at all facilities except Consolidation Facilities. For each incoming load, the Contractor shall record the category of materials, the source, the tare weight, date, and time.*

### **Outgoing Materials Record (3.5.3) –**

*The Contractor shall maintain detailed records of MSW, MSW-derived materials, and IW leaving all facilities except Consolidation Facilities. For each outgoing load, the Contractor shall record the category of materials, the destination, the tare weight, date, and time. During the Preparation Period the Contractor will provide the GOC with a list of products that will be produced and sold.*

The Monitors will ensure that during the Operation Period the system is maintained and operated according manufacturer requirements.

Monitors will spend a portion of each day in the scale-house observing the Contractor's employees as they weigh and classify incoming and outgoing loads. Monitors will make certain that the Contractor properly weighs and records all incoming and outgoing loads.

Each day, Monitors will inspect the Contractor's records to determine if complete information was recorded for each load in the Incoming and Outgoing Materials Records. Information should include:

- Source of waste/material (for incoming loads).
- Destination of waste/material (for outgoing loads).



- Category of waste/material (e.g., residential/commercial waste, street sweepings, litter, industrial waste, processing residuals for disposal, putrescible waste for composting, and recycled materials).
- Date and time.
- Identification number of the vehicle.
- Gross vehicle weight.
- Tare weight.

The Monitor will randomly select entries from the Contractor's Incoming and Outgoing Materials Records and compare them against weight slips to verify that weight data is being properly recorded.

If the Incoming Material Record or Outgoing Material Record it is not properly maintained or if it is not readily available for inspection, the Monitor shall report it as a violation on their Processing and Transfer Facility Daily Inspection Form.

### **Waste Receiving**

Three separate Contract terms ensure that the Contractor will receive waste in a manner that conforms to the GOC's goals to minimize negative impacts on the public and the environment, and to handle waste in an expeditious manner. Contract terms establish limits on the following:

- Source of waste.
- Access and hours of operation.
- Residence time of waste.

### **Source of Waste (2.3) --**

*All facilities shall receive and process only Residential and Commercial Wastes and Industrial Wastes collected by Contractors under contract with the GOC.*

Each day, Monitors will inspect the Contractor's Incoming Waste Records. They will inspect all entries for incoming loads to determine if complete information was recorded regarding category.

Each day, Monitors will randomly select several incoming loads, perform their own assessment when the waste is discharged at the facility, and determine the source of waste. They will then compare their own records against those of the Contractor to determine if the Contractor is properly classifying incoming waste. If the Monitor determines that the Contractor has received any waste that does not comply with this specification, he/she will record it as a violation on the Processing and Transfer Facility Daily Inspection Form.

## **Access Control and Hours of Operation (2.8.1) --**

*Delivery of waste to Consolidation Sites and Transfer Facilities may occur at any time of the day or night, according to the GOC program. At any time waste is not being delivered to these facilities, the facility must be closed and secured in a manner that prevents access of unauthorized people or vehicles.*

## **Residence Time (3.2) --**

*MSW and MSW-derived materials and IW must be removed from the facility to Disposal Facility within twenty-four (24) hours of being received at the Processing Facility. There shall be no overnight storage of MSW or putrescible MSW-derived materials or IW in the receiving area.*

Each day, Monitors will inspect the stockpile of waste at the beginning and end of their shift. If any of the waste is still present from the previous day when they complete their shift, Monitors will record it as a violation on their Processing Facility Daily Inspection Form.

## **Materials Processing and Disposal**

The GOC has established constraints on how the Contractor handles waste. This is necessary to ensure that processing and transfer activities are conducted in a professional manner, do not have an adverse impact on the public or the environment, and do not cause uncontrolled disposal of waste. Contract terms establish limits on the following:

- Handling of putrescible waste.
- Location of processing activities.
- Scavenging.
- Waste disposal.

## **Handling of Putrescible Waste (2.4) --**

*All putrescible components of solid waste that are diverted from disposal by the Contractor shall be processed at Composting Facilities specified in the Contractor's Work Plan.*

Mixed waste from collection services may be processed to remove recyclable and/or contaminants, but any putrescible waste that is diverted from disposal must be delivered to a composting facility. Practices such as direct animal feeding are prohibited.

Each week, Monitors who are stationed at processing facilities will use the Outgoing Materials Record to prepare a report that details the date, time, and tare weight of all loads categorized as putrescible waste and destined for composting. The Monitors will provide this report to the Monitors stationed at compost facility(s), who will then crosscheck the report against the compost facility's Incoming Material Record. If they determine that a load of putrescible waste was not delivered intact to the composting facility, the compost facility

Monitors will record each instance as a violation of this specification on their Processing and Transfer Facility Daily Inspection Form.

## **Waste Disposal (2.5) --**

*The Contractor shall deliver all residue from Material Recovery Facilities to the Designated Disposal Facility located on Site.*

Each week the Monitors will receive a report from the landfill Monitors. The report will list information regarding all loads received at the Landfill that originated from their facility. The Monitors will then crosscheck the report against their own facility's records of outgoing loads. If they determine that a load was not delivered intact to the Landfill, the Monitors will record each instance as a violation of this specification on their Processing Facility Daily Inspection Form.

## **Waste Transport**

The RFT contains requirements to ensure that all materials from processing and transfer facilities are transported in a manner that conforms to the GOC's standards for cleanliness, efficiency, and minimum impact on the public and environment. Transport of all materials and waste must conform to the following:

### **Transport of Materials (2.9.3) –**

*The Contractor shall comply with all applicable requirements when transporting MSW or MSW-derived materials and IW between processing facilities or between processing facilities and Designated Disposal Facility.*

Fixed Facility Monitors at processing and transfer facilities will be responsible for assessing Contractor compliance with the following provisions contained in the RFT for Solid Waste and Public Facility Cleaning Services:

- Cargo area of waste collection vehicles (3.1.3).
- Collection vehicles with hydraulic compaction (3.1.5).
- Collection vehicle loading (3.1.16).

Other collection vehicle requirements will be assessed by the Collection and Cleaning Monitors and the Fixed Facility Monitors stationed at equipment maintenance and storage facilities. If collection and transport vehicles are housed at any Processing and Transfer Facility, the Monitors stationed there will follow the procedures describe elsewhere in this Appendix for monitoring equipment maintenance and storage facilities.

**Cargo Area of Waste Collection Vehicles (3.1.3)** -- *The area of the waste collection vehicle body used for the compaction and storage of MSW shall be watertight and prohibit spillage of any solids or liquid waste materials, oil, grease or other substances onto the ground or exterior body of the vehicle. Should any such solid waste, oil, grease, or other substances be dropped or spilled during the Contractor's operations, it shall be immediately cleaned up.*

Monitors will observe vehicles as they enter and exit the facility. If the Monitors observe spillage or leakage, they will record it as a violation on the Process and Transfer Facility Daily Inspection Form. They will include the vehicle identification number, time and location of the spillage, and the type of material that was spilled.

**Collection Vehicles with Hydraulic Compaction (3.1.5)** --*Waste Collection Vehicles equipped with hydraulic compaction systems shall have the ability to compress all MSW collected to a density of at least 600 kg per cubic meter.*

Using the Incoming Material Records, each day Monitors will record the truck capacity (cubic meters) and tare weight for all loads of MSW delivered by a vehicle with hydraulic compaction. The Monitor will then calculate the theoretical density of each load (tare weight divided by truck capacity). Monitors will record on their Processing and Transfer Facility Daily Inspection Form the total number of loads, the number of loads, and the number of loads that meet or exceed the required density.

**Collection Vehicle Loading (3.1.16)** --*No vehicle used for collection shall be loaded in excess of the manufacturer's GVW rating or in excess of the maximum weight specified by the Egyptian Roads and Bridges Authority.*

Each day, Monitors will inspect the Contractor's Incoming Materials Record and determine whether any vehicle has exceeded its Gross Vehicle Weight or the maximum road weight limits established by the Egyptian Roads and Bridges Authority. The Monitors will record all violations of this requirement on their Processing and Transfer Facility Daily Inspection Form.

### **Personnel**

The RFT contains specific terms to ensure that the Contractor's personnel meet the GOC's goals for health, safety, and professional behavior. Contract terms address the following issues:

- Safety equipment.
- Fees and gratuities.

### **Safety Equipment (3.6.2) --**

*The Contractor shall provide and require all employees to use adequate gloves, work boots, eye protection, ear protection, and other protective clothing as necessary to maintain their safety.*

The Monitors will observe Contractor employees each day to assess compliance with the requirement. If employees are not using safety equipment as specified, the Monitors will notify the Contractor and request corrective action. The Monitors will record their observations as well as the actions taken by the Contractor on their Processing and Transfer Facility Daily Inspection Form.

### **Fees and Gratuities (3.6.3) --**

*The Contractor shall not permit any employee, agent or subcontractor to offer special service beyond the scope of this Contract, or to request, solicit, demand, or accept, either directly or indirectly, any compensation or gratuity for services that fall within the scope of this Contract.*

The Monitors will observe Contractor employees each day to assess compliance with the requirement. If they witness improper behavior, they shall notify the Contractor and request corrective action. The Monitors will record their observations as well as the actions taken by the Contractor on their Processing and Transfer Facility Daily Inspection Form.

### **Environmental Control and Emergency Response**

The RFT contains certain terms to ensure that the Contractor meets the GOC's goals for minimizing public nuisances, adverse environmental impacts, and burden on GOC's emergency services. Contract terms address the following issues:

- On-site run-off and leachate control.
- Facility access control.
- Odor complaints.
- Litter control.
- Emergency events.

### **On-site Run-off and Leachate (3.7.1) --**

*For all facilities, all surface run-off from precipitation falling within any area where MSW or putrescible MSW-derived materials or IW may come in contact with the ground shall be separated from all other run-off, collected, and contained in a holding tank(s). Collected run-off and leachate may be utilized for moisture addition in compost feedstock preparation*

*or active composting. Alternately it may be disposed of at a treatment facility subject to GOC approval.*

The Monitors will periodically inspect surface slopes and drainage structures to ensure that they are properly maintained and functioning as intended. The Monitors must pay special attention to drainage structures that may become clogged with waste or other material. After rainstorms, the Monitors will inspect their facilities to determine if run-off and leachate control systems are functioning properly. If on-site run-off is not being collected and contained, the Monitors will notify the Contractor and request corrective action. The Monitors will record their observations as well as the actions taken by the Contractor on their Processing and Transfer Facility Daily Inspection Form.

### **Facility Access Control (3.7.2) --**

*All facilities must be surrounded by a combination of fencing (or other structural barrier) and gate(s) that prevent uncontrolled access and vandalism to the facility. All fencing, barriers, and gates shall be maintained in proper working order at all times.*

Once each week the Monitors will inspect the site fence/barrier and gates to determine if there are any holes or breaks. If they find any damage or breaks, they will inform the Contractor and request corrective action. The Monitors will record their observations as well as the actions taken by the Contractor on their Processing and Transfer Facility Daily Inspection Form.

### **Odor Complaints --**

The following Contract provision addresses requirements for handling odor complaints.

**Odor Complaint Record (3.5.8)** -- *The Contractor shall maintain an odor complaint record that records the following information for each odor complaint received by the Contractor:*

- *Date and time of complaint.*
- *Person or entity filing the complaint.*
- *Person recording the complaint.*
- *Description of the complaint.*

*The Contractor shall record the results of odor assessments that are conducted in response to odor complaints, including the following information:*

- *Date and time of assessment.*
- *Person performing the assessment.*
- *Location of assessment.*

- *Relative odor intensity.*
- *Relative odor character.*

All processing and transfer facilities are required to maintain an Odor Complaint Record. The Monitors will inspect the Odor Complaint Record each week and determine if the required information has been recorded. If the Record is not properly maintained or if it is not readily available for inspection, the Monitor shall report it as a violation.

Monitors will also be aware of when some odor complaints are received at the facility. In such cases, the Monitors will work to verify the odor problem themselves. Monitors will record information regarding odor complaint that they have verified on their Processing and Transfer Facility Daily Inspection Form.

### **Litter Control (3.7.3) --**

*The Contractor shall operate the facility in a manner that does not allow litter to escape the boundaries of the site. On a daily basis the Contractor shall inspect the entire facility and collect all litter.*

The Monitors will observe the Contractor's litter control practices each day. If they observe off-site litter caused by the facility, the Monitors will inform the Contractor and request corrective action. If the Contractor does not take corrective action, the Monitor shall record the event as a violation.

### **Emergency Event Record (3.5.10) --**

*The Contractor shall maintain an emergency event record that records the following information for every occurrence of fire or accident causing personal injury:*

- *Date and time of the emergency event.*
- *Person recording the emergency event.*
- *Location of the event.*
- *Type of emergency event.*
- *Description of actions taken.*

Monitors will be aware of emergency events when they occur due to their presence on-site. The Monitors will inspect the Contractor's Emergency Event Record each week to evaluate compliance with the requirements. If the Record is not properly maintained or if it is not readily available for inspection, the Monitor shall report it as a violation on their Processing and Transfer Facility Daily Inspection Form. Monitors will also report each occurrence of fire at a facility as a violation on their Processing and Transfer Facility Daily Inspection Form.

## **Compost Facility Operations**

Compost facilities are a type of processing facility. In addition to the procedures describe above, Monitors must evaluate compliance with Contract provisions that apply only to a compost facility. If the Contractor elects to develop and operate a compost facility(s), Fixed Facility Monitors will be required to evaluate compliance with the applicable Contract terms in the following categories:

- Pre-processing.
- Active composting.
- Curing
- Post-processing.
- Compost laboratory.

The following paragraphs describe Contract terms and suggested monitoring procedures.

### **Pre-Processing --**

The GOC has required that materials must meet minimum standards before they can be composted. The minimum standards are established so that compost feedstock will promote optimum conditions for rapid, aerobic decomposition. Contract terms address the following issues:

- Physical parameters:
  - Particle size.
  - Moisture content.
  - Non-organic physical contaminants.
  - Homogeneity.
- Chemical parameters:
  - Carbon:Nitrogen ratio.
- Time limit prior to composting.

**Compost Feedstock Preparation (3.3.1)** -- *The compost feedstock preparation system shall be capable of 1) removing inorganic contaminants and recyclable materials and 2) producing a compost feedstock with the following parameters:*

- *Particle size: 100% passing an 8-cm screen.*
- *Moisture content: 40% to 60%*
- *Carbon:Nitrogen (C:N) ratio: greater than 25:1 (weight basis).*
- *Non-organic physical contaminants: less than 5% (weight basis).*



*Contaminants and recyclables may include, but not be limited to, plastic, glass, metal, paper, cardboard, textiles, batteries, brick, concrete, asphalt, stone, and other inorganic wastes.*

*Bulking agents may be utilized to adjust the moisture content and Carbon: Nitrogen ratio of compost feedstock. Bulking agents shall meet the following parameters:*

- *Moisture content: less than or equal to 25%.*
- *Carbon: Nitrogen (C:N) ratio: greater than or equal to 60:1.*

*Water may be utilized to adjust the moisture content of compost feedstock.*

*Compost feedstock shall be thoroughly mixed and homogeneous prior to active composting.*

*All compost feedstock shall be placed into active composting within 12 hours after it is produced.*

*Only compost feedstock that has met the requirements of this section shall be acceptable for active composting.*

Monitors will visually inspect compost feedstock and bulking agents every day. If any material appears to not comply with the requirements, the Monitor may gather a sample of material and provide it to the Contractor's compost laboratory for analysis. Monitors will receive the lab results and determine if the sample complies with the standards. If it does not, the Monitors will report it as a violation on their Processing and Transfer Facility Daily Inspection Form.

Each day, compost facility Monitors will inspect the stockpile of compost feedstock at the end of their shift. If any of the stockpile is still present when they begin their shift the next day, Monitors will record it as a violation on their Processing and Transfer Facility Daily Inspection Form.

## **Active Composting --**

Active composting is the rapid, aerobic, high temperature decomposition of organic matter into a humus-like material. The GOC has required that the Contractor utilize the turned windrow composting technology. This method requires frequent turning and careful management of moisture content to maintain aerobic conditions and to ensure uniform decomposition. The GOC has established specific requirements for active composting that address:

- Moisture content.
- Residence time.
- Pathogen reduction:
  - Minimum temperature.
  - Number of turnings.

- Temperature monitoring.
- Composting records.
- Windrow identification.

**Active Composting (3.3.2)** -- *Composting material shall have moisture content of 40% to 60% throughout active composting. All composting materials must remain in the active composting area for a minimum of 28 days. The minimum 28-day residence time shall be measured starting on the last day that compost feedstock is added to an individual windrow.*

*All composting material must meet the following time, temperature and turning requirements before it can be removed from active composting:*

- *The temperature of the composting material shall be maintained at 55 degrees or higher for a minimum of 15 days, during which time there shall be a minimum of five turnings of the composting material.*
- *Composting material meeting minimum residence time and pathogen reduction requirements shall be removed from the active composting area directly to the curing area.*

**Compost Windrow Temperature Monitoring (3.3.6.1)** -- *The Contractor shall measure the temperature of all windrows in active composting daily. Temperatures shall be taken at 15 and 60 centimeters below the pile surface at no greater than 10-meter intervals along the windrows.*

**Active Composting Record (3.5.4)** -- *The Contractor shall keep an active composting record. The Contractor shall maintain the active composting record in manner that clearly identifies each windrow by a unique identification code and record the following information for each windrow:*

- *Date(s) of construction.*
- *Temperature measurements by date.*
- *Turning events by date.*
- *Date(s) of consolidation with other windrows.*
- *Date of de-construction and removal to curing.*

Each day the Monitors will assess the moisture content of windrows. If they believe that any composting material does not have the required moisture content, they shall request that the Contractor correct the situation. The Monitors will observe temperature monitoring activities to ensure the Contractor is following proper procedures. If they witness improper procedures, they shall notify the Contractor and request corrective action. The Monitors will record their observations as well as the actions taken by the Contractor on their Processing and Transfer Facility Daily Inspection Form.

In order to evaluate compliance with the minimum retention time and pathogen reduction standards, the Monitors will inspect the Composting Record for each windrow when it is scheduled for de-construction and removal to curing. The Monitors will calculate the number of days in active composting, the average daily temperature, and the number of turnings. If a windrow does not meet the requirements, the Monitors will inform the Contractor and request that the windrow be blended with fresh compost feedstock and re-introduced to composting. They will record the event as a violation on their Processing Facility Daily Inspection Form and make note of the corrective actions taken by the Contractor.

If the Composting Record is not properly maintained or if it is not readily available for inspection, the Monitor shall report it as a violation on their Processing Facility Daily Inspection Form.

**Windrow and Curing Pile Identification (3.3.5)** -- *Each composting windrow shall be assigned a unique identifying code number and clearly marked with this code number and the date(s) on which the windrow was constructed.*

*Each curing pile shall be assigned a unique identifying code number and clearly marked with this code number and the date(s) on which the pile was constructed.*

Each day the Monitors will inspect the active composting area of the compost facility to evaluate compliance with the requirement. If a windrow is not properly identified the Monitors will record each occurrence as a violation on their Processing and Transfer Facility Daily Inspection Form. They will also inform the Contractor of their observations.

## **Curing --**

After active composting, the raw compost is not yet ready for beneficial use. Raw compost must be cured for an extended period to allow complete decomposition and stabilization. Once curing is completed, compost has reached ambient temperatures and does not produce offensive odors. The GOC has established specific minimum requirements for curing to ensure that the Contractor meets the GOC's goals for producing high quality compost and limiting adverse impacts on compost users. Curing requirements address the following:

- Residence time.
- Number of turnings.
- Stability standards:
  - Temperature.
  - Odor potential.
- Temperature monitoring.
- Curing records.
- Windrow identification.

**Curing (3.3.3)** -- Compost must be cured for a minimum of 45 days. The minimum 45-day residence time shall be measured starting on the last day that compost from active composting is added to the curing pile. During that time the compost must be turned and thoroughly mixed a minimum of six (6) times.

*All compost must meet the following two stability standards:*

- *The curing pile temperature has fallen to ambient temperature.*
- *A composite sample from a curing pile shall be moistened to approximately 50% moisture content, enclosed in a double sealed, air tight bag and held between 15 and 25 degrees for 48 hours. The bag shall then be opened and the presence of odor shall be ascertained. Stable compost will not generate offensive odors.*

*All curing compost meeting minimum residence time and stability standards shall be removed from the curing area directly to the compost refinement area.*

*Materials not meeting the stability requirement shall be blended with fresh raw compost and re-introduced to the curing area.*

*Only compost that meets the requirements of this Section shall be acceptable for compost refinement.*

**Curing Pile Temperature Monitoring (3.3.6.2)** -- *The Contractor shall measure the temperature of all curing piles a minimum of three times weekly. Temperatures shall be taken at 15 and 60 cm below the pile surface at 10-meter intervals along the pile.*

**Compost Curing Record (3.5.5)** -- *The Contractor shall keep a compost curing record. The Contractor shall maintain the curing record in a manner that clearly identified each curing pile by a unique identification code and records the following information for each curing pile:*

- *Date(s) of construction.*
- *Temperature measurements by date.*
- *Turning events by date.*
- *Date(s) of consolidation with other piles.*
- *Date of de-construction and removal from curing.*

The Monitors will observe temperature monitoring activities to ensure the Contractor is following proper procedures. If they witness improper procedures, they shall notify the Contractor and request corrective action. The Monitors will record their observations as well as the actions taken by the Contractor on their Processing and Transfer Facility Daily Inspection Form.

In order to evaluate compliance with the minimum retention time and turning standards, the Monitors will inspect the Curing Record for each curing pile when it is scheduled for deconstruction and removal to refinement and storage. The Monitors will calculate the number of days in curing and the number of turnings. They will determine whether the pile temperature has fallen to ambient temperature. They will assess the odor of the composite sample collected and treated according to the requirements by the Contractor.

If a curing pile does not meet the requirements, the Monitors will inform the Contractor and request that the windrow be blended with fresh raw compost and re-introduced to curing. They will record the event as a violation on their Processing and Transfer Facility Daily Inspection Form and make note of the corrective actions taken by the Contractor.

If the Curing Record is not properly maintained or if it is not readily available for inspection, the Monitor shall report it as a violation on their Processing and Transfer Facility Daily Inspection Form.

## **Post-Processing --**

The GOC has established minimum requirements for treatment of compost after curing. It is the GOC's goal that the Contractor produce high quality compost that can be readily marketed and for which strong demand and value can be created. Contract terms that specifically define the provisions for post-processing address the following:

- Compost refinement and storage:
  - Maximum levels of contaminants in compost.
  - Maximum allowable storage time.
- Compost refinement records.
- Compost storage and distribution records.
- Compost quality analysis.

**Compost Refinement and Storage (3.3.4)** -- *The compost refinement operation shall be capable of screening and producing compost product(s) with less than 1 percent visible non-organic contaminant (weight basis). Only compost meeting this requirement shall be acceptable for distribution and/or sale.*

*Compost must be removed from the composting facilities within 8 months of the date it was removed from curing.*

**Compost Refinement Record (3.5.6)** -- *The Contractor shall maintain a compost refinement record that records the daily quantities of compost processed and the daily quantity of contaminants removed and disposed.*

**Compost Storage and Distribution Record (3.5.7)** -- *The facility operator shall maintain a compost storage and distribution record that records the following information:*

- *The date, volume and type (i.e. Cured Compost and Refined Compost) of compost entering storage.*
- *The date, volume, weight and type of each load of compost removed from the facility for Beneficial Use.*

**Compost Quality Analysis (5.2.19)** -- *Each week, a composite of single grab samples taken from the compost entering storage each day shall be analyzed for moisture content, volatile solids content, pH, bulk density, particle size, and conductivity.*

*Each week, a composite of single grab samples taken from the compost entering storage each day shall be subjected to a Cress test to determine that the compost is stable and not phytotoxic. A successful test shall be indicated by greater than 90% seed germination.*

*Each week, a composite of single grab samples taken from the compost entering storage each day shall be subjected to an inorganic contaminant analysis. Compliance with the inorganic physical contamination requirement shall be determined as follows: a dried, weighed sample of the compost shall be sieved through a 6 mm screen. The material remaining on the screen shall be visually examined and inorganic physical contaminants that can be clearly identified shall be separated and weighed. The weight of the separated contaminants divided by the total sample weight multiplied by 100 is the percentage dry weight of contaminants.*

The Monitors will inspect refined compost produced each day and visually assess if it meets the quality standard (less than 1 percent visible non-organic contamination). If it does not appear to meet the standard, the Monitors shall notify the Contractor and request that the compost be re-introduced to the refinement system. The Monitors will record their observations as well as the actions taken by the Contractor on their Processing and Transfer Facility Daily Inspection Form.

In addition, the Monitors will inspect the laboratory analyses of refined compost once each week. If a sample of refined compost does not meet the requirements, the Monitors will inform the Contractor and request that the compost be re-introduced to the refinement system. They will record the event as a violation on their Processing and Transfer Facility Daily Inspection Form and make note of the corrective actions taken by the Contractor. They will utilize the Compost Refinement Record to determine how many tons of compost did not meet the standard.

To evaluate compliance with the maximum storage limit of 8 months, the Monitors will analyze the Compost Storage and Distribution Record at the end of each month. They will also rely on their own visual observations of the compost storage area over time. Monitors will evaluate compliance with the standard by tabulating the running total of compost stored at the facility. The running total is equal to the tons entering storage plus tons leftover from the previous month minus tons leaving storage for market. If the running total of stored compost ever exceeds the total tons entering storage during the past 8 months, the Contractor is deemed to have violated the standard. The Monitors will record the event as a violation on their Processing and Transfer Facility Daily Inspection Form and record the number of tons by which the Contractor exceeded the storage limit.

The Monitors will observe daily sampling activities to ensure the Contractor is following proper procedures. If they witness improper procedures, they shall notify the Contractor and request corrective action. The Monitors will record their observations as well as the actions taken by the Contractor on their Processing and Transfer Facility Daily Inspection Form.

The Monitors will inspect the Compost Refinement Record and Compost Storage and Distribution Record each week. If the records are not properly maintained or if it is not readily available for inspection, the Monitor shall report it as a violation on their Processing and Transfer Facility Daily Inspection Form.

## **Laboratory --**

Through all stages of operations at the compost facility, the Contractor must evaluate the physical and chemical properties of materials. Therefore, the GOC has established minimum requirements for the Contractor regarding laboratory analysis. Contract terms that specifically define the provisions for the laboratory address the following:

- Laboratory capabilities.
- Laboratory records.

**Laboratory Records (3.5.11)** -- *The laboratory facility shall maintain comprehensive records of all materials testing and analysis performed at the laboratory or by offsite analytical services. The lab records shall include the following information:*

- *Date and time of sample collection.*
- *Type of sample (i.e., grab versus composite).*
- *Type and source of sample material.*
- *Type of test(s) performed.*
- *Results of tests performed.*
- *Person responsible for performing test.*

The Monitors will inspect the laboratory reference manual and laboratory records once each week to evaluate compliance with the requirements. If the reference manual or records are not properly maintained or if they are not readily available for inspection, the Monitor shall report it as a violation on their Processing Facility Daily Inspection Form.

## **Reporting**

The Contractor is required to submit regular reports to the GOC that provide details on the service provided. The Monitors will not have primary responsibility for assessing Contractor compliance with the reporting requirements. The Contractor will submit reports to the Fixed Facilities Department where they will be reviewed by the Compliance Analyst-Fixed Facilities. The Compliance Analysts may request input from the Monitors to verify

information reported by the Contractor compared against the field observations and Processing and Transfer Facility Daily Inspection Forms filed by the Monitors.

Monitor should be familiar with the following Contract provisions that describe reporting requirements.

**Monthly Operations Reports (GC A1.2 2.12.2)** -- *The Contractor shall submit Monthly Operations Reports (MORs) to the GOC Project Administrator that include information concerning the performance of the Processing and Transfer Service. The reports shall be in a form acceptable to the GOC. The MORs shall include, but not be limited to, the following information:*

- *Monthly tonnage of incoming materials for each facility.*
- *Monthly tonnage of outgoing materials for each facility.*
- *Monthly tonnage of recycled products from each facility, including compost, shipped by the Contractor or any Sub-contractors to third parties.*
- *Record of individual complaints and resolution of each complaint for each facility.*
- *Summary of all test results.*
- *Description of any violations of law or regulations and their resolution.*
- *Each MOR shall be submitted to the GOC Project Administrator by the 10th day of the following month.*

**Annual Operations Reports (2.12.3)** -- *The Contractor shall submit Annual Operations Reports (AORs) to the GOC Project Administrator. The AORs shall include, but not be limited to, annual summaries of the results provided in the MORs. Each AOR shall be submitted to the GOC Project Administrator within 30 days following the end of the preceding Contract year.*

## **MONITORING LANDFILL FACILITY OPERATIONS**

The requirements for landfill service are located in the RFT for Landfilling and Processing Services. The 15<sup>th</sup> of May Landfill site is described in the RFT. It will be designed, constructed, and operated by the Contractor and will serve as the Designated Disposal Facility for the Southern Zone.

Fixed Facility Monitors will be on-site at the landfill during the Operations Period to monitor Contractor compliance with service specifications and minimum technical requirements in the following categories:

- Operating schedule.
- Waste receiving.



- Filling operations.
- Personnel.
- Facility and equipment maintenance and repair.
- Site control and safety.
- Environmental monitoring.
- Reporting.

Monitors will be stationed at the scalehouse and landfill face during all operating hours. Contract terms and suggested monitoring procedures for each category are provided in the separate sections below.

### **Operating Schedule**

#### **Hours and Days of Operation (2.4) --**

*All facilities shall be open for operation seven days per week and 24 hours per day throughout the Operations Period. The Initial Disposal area shall be operational and capable of receiving wastes at the beginning of the Operations Period. The Engineered Landfill shall be operational and capable of receiving wastes not later than 180 days after the Contract Signing Date.*

If the Contractor does not operate the landfill in accordance with the agreed upon landfill operation schedule, the Monitors will report it as a violation on their Landfill Daily Inspection Form.

### **Waste Receiving**

The landfill serves as the final disposal site for all waste collected and treated by the Contractor in the Southern Zone. The Contractor must receive (1) only acceptable waste, and (2) all acceptable waste from Contractor operations in the Southern Zone that is not diverted to beneficial use. The GOC has established specific Contract terms to control waste receiving procedures. These requirements fall into the following categories:

- Acceptable and unacceptable waste.
- Weighing and classification system.
- Scale-house.
- Vehicle management.

- Waste received from collection services.
- Waste received from other fixed facilities.

A Monitor will be stationed at the landfill scalehouse during all operating hours to assess Contractor compliance with the requirements.

### **Acceptable and Unacceptable Waste (2.6.1) --**

*Acceptable Waste may include Residential and Commercial Solid Waste, Industrial Waste, and residue from a Medical Waste treatment facility, Construction & Demolition Waste, Accumulated Waste, and residues from Designated Processing Facilities. Unacceptable waste shall be all other wastes including, and not be limited to, hazardous waste, liquid wastes, and radioactive wastes.*

The Monitor will observe Contractor handling of incoming loads to ensure that only Acceptable waste from the Southern Zone is allowed into the landfill. If the Monitor observes that the Contractor receives waste of any other kind, he/she will inform the Contractor and request corrective action. If corrective actions are not taken by the Contractor, the Monitor will record the event as a violation on the Landfill Daily Inspection Form.

### **Weighing and Materials Classification System (2.6.2) --**

*The Contractor shall maintain a system for classifying, weighing, and recording all incoming waste and specific vehicle information. Records will be classified by the following categories:*

- *Residential and Commercial Waste*
- *Industrial Waste*
- *Medical Waste*
- *Residue from Composting Facility*
- *Residue from Recycling Facility*
- *Construction & Demolition Debris*
- *Accumulated Waste*
- *Sludge or Other Special Waste*
- *Vehicle Type*
- *Vehicle Gross and Tare Weight*
- *Vehicle License Number or Truck Number and Contractor*

Each day, the Monitor will inspect the Contractor's records. He/she will inspect all entries for incoming loads to determine if complete information was recorded. If the Monitor determines that the Contractor has not maintained detailed information for each incoming load, he/she will report it as a violation on the Landfill Daily Inspection Form.

Each day, the Monitor stationed at the landfill face will randomly select several incoming loads, assess the waste as it is discharged, and determine the source of waste. He/she will then compare his/her records against those of the Contractor to determine if the Contractor is properly classifying incoming waste. If the Monitor determines that the Contractor has improperly classified waste, he/she will inform the Contractor and request corrective action. The Monitor will record his/her observations as well as the actions taken by the Contractor on the Landfill Daily Inspection Form.

#### **Scale House (3.4.4) --**

*The Engineered Landfill design shall include a scale house located at the entrance and equipped with a minimum of two platform truck scales and a computerized system for billing and tracking incoming waste. The platform scales shall have the capability of accurately measuring tare and net weights of a range of vehicles from pick-up trucks to transfer trailers. The scales shall have a minimum accuracy of +/- 20 kilograms (Kg). The scalehouse shall be a permanent structure furnished with appropriate space to maintain and operate the computerized weight recording system, store historical records, and have sufficient room for two scalehouse operators.*

The Monitor will randomly select entries from the Contractor's scalehouse records and compare them against weight slips to verify that weight data is being properly recorded.

By being present at the scalehouse during all operating hours, the Monitor can determine if the scalehouse and any back-up systems are properly functioning. If the scalehouse and back-up systems are not functioning during operating hours, the Monitor will report it as a violation on the Landfill Daily Inspection Form.

#### **Vehicle Management at Scale House (3.6.4) --**

*Dedicated lanes will be constructed to regulate the flow of traffic to the truck weigh scales. All incoming waste collection vehicles shall be weighed prior to unloading at the Landfill face. At the scalehouse vehicles shall be managed utilizing a manual flagging system or an automated traffic signal.*

*The Contractor shall insure that vehicle queuing time at the scalehouse is kept to a minimum, especially during peak delivery times. A temporary access road shall be constructed from the scalehouse to the face of the landfill. This road shall be wide enough to allow for two-way traffic of transfer trailers.*

By being present at the scalehouse during all operating hours, the Monitor can determine if vehicles are being managed efficiently and if the flagging system or traffic signal is operating properly. If vehicles are not being managed effectively, the Monitor will inform the

Contractor and request corrective action. The Monitor will record his/her observations and the actions taken by the Contractor on the Landfill Daily Inspection Form.

## **Waste Received from Collection Services --**

The GOC must obtain accurate data on all waste that is collection, treated, diverted, and disposed in the Southern Zone. This data will assist the GOC to plan effective and efficient waste management services. The Monitors will play an essential role to ensure that accurate and complete records are maintained by the Contractor. Contract terms for residential and commercial waste collection and infectious medical waste management service require that all loads be transported to and weighed at designated facilities.

**Transfer, Processing and Disposal of Collected Wastes (2.8)** -- *All MSW and Bulky Wastes collected as a result of performing Residential and Commercial Waste Collection Services shall be transported to Designated Transfer, Processing or Disposal Facilities, where the weight shall be measured and recorded using certified automated scales.*

**Designated Processing and Disposal Facilities (2.7.3)** -- *Street Sweepings and Litter shall be transported to Designated Transfer, Processing or Disposal Facilities, where the weight shall be measured and recorded using certified automated scales operated by GOC personnel.*

The Monitors will ensure that all loads received directly from residential and commercial waste and industrial waste collection services are properly weighed and categorized. Monitors will use the procedures described above for monitoring the weighing and materials classification system to determine if the Contractor is properly categorizing loads of waste delivered by collection vehicles.

## **Waste Received from Other Fixed Facilities --**

Contract provisions for processing and transfer and infectious medical waste services establish the landfill as the final and sole disposal site.

**Waste Disposal (2.5)** -- The Contractor shall deliver all residue from Material Recovery Facilities to the Designated Disposal Facility located on Site.

**Treated Infectious Medical Waste Residue Disposal (2.5)** -- *The Contractor shall deliver all Treated Infectious Medical Waste Residue resulting from Treatment to the Designated Disposal Facility(s). For the purpose of preparing its Technical and Financial Proposals, Pre-Qualified Contractors shall assume the Designated Disposal Facility is the 15<sup>th</sup> of May landfill site.*

Each week the landfill Monitors will utilize the scalehouse records to generate a report for each facility that shipped waste to the landfill. The report will list the date, time, and tare weight of all loads shipped to the landfill from that facility. The Monitors stationed at the landfill will provide the report to the Monitors stationed at the other fixed facilities.

## **Filling Operations**

The Contract contains specific provisions to establish minimum standards for how the Contractor operates the active landfill face. Good landfilling practices are necessary to control negative environmental impact such as fire, litter, odor, and vectors. Contract provisions address the following:

- Compaction of landfilled waste.
- Daily and Intermediate cover.

### **Compaction of Landfilled Waste (3.6.7) --**

*In-place waste compaction densities shall average at least 700 Kg/ m<sup>3</sup>*

The Compliance Analysts-Fixed Facilities will receive the plans and reports that are required to evaluate this requirement. Although the Monitors are not responsible for evaluating Contractor compliance with this requirement, they may be called upon to provide field assessments of Contractor activities.

### **Daily and Intermediate Soil Cover (3.6.6) –**

*The Contractor shall be required to cover all areas where waste has been deposited with a minimum of 10 cm of the excavated soil at the end of each day. The Contractor shall maintain a cover stockpile management area and sufficient cover material. The cover material shall consist of excavated soil or a GOC approved synthetic material. It shall be the Contractor's responsibility to ensure that sufficient cover material is available at the Site. If not, it is the Contractors responsibility to haul the cover material at its own cost from another source.*

*A minimum of 10 days cover material supply shall always be available on Site.*

*If the Contractor intends to suspend placement of additional waste material for a time of 6 months or more in an area of the landfill that already has received wastes, then the Contractor shall place an Intermediate Cover over the area. The Intermediate Cover shall consist of 20 cm of soil.*

A Monitor will be present at the landfill face during all operating hours. If the Monitor observes daily cover practices that contradict this requirement, he/she will inform the Contractor and request corrective action. The Monitor will record his/her observations and the actions taken by the Contractor on the Landfill Daily Inspection Form.

Each week the Monitor will calculate the average daily cover material use and determine if the cover material stockpile provides at least 10 days of supply. If the Monitor determines that there is insufficient cover material on site, he/she will inform the Contractor and request corrective action. The Monitor will record each occurrence as a violation on the Landfill Daily Inspection Form.

## **Personnel**

The Contract terms include provisions regarding personnel that are intended to ensure adequate staffing and professional behavior. The Contract addresses the following personnel related concerns:

- Scavenging.
- Staffing and Management.

### **Scavenging (2.7) --**

*The Contractor shall forbid all employees, Sub-Contractors, or the general public from informally scavenging any waste delivered to the Engineered Landfill. However, the Contractor has the right to isolate and sort out bulky items for recycling from the delivered waste. Bulky items include large appliances, furniture, and large metal objects.*

*Any on-site sorting or recycling activity shall be confined to the area of the Landfill dedicated to the Material Recovery and Composting Facility. All salvaged and sorted items must be removed, sold, or landfilled one week.*

The Monitors will inspect landfill operations each day to evaluate compliance with this requirement. If the Monitors observe personnel scavenging, they will record a separate violation for each person on their Landfill Daily Inspection Form. They will notify the Contractor and request that such activity cease immediately.

### **Staffing and Management (3.6.1) --**

*The selected Contractor shall be responsible for providing all manpower, equipment, supplies, etc. required to manage and operate the Engineered Landfill. Staffing will at a minimum include the following:*

- *Landfill Manager*
- *Shift Supervisors*
- *Scale house Operators*
- *Equipment Operators*
- *Mechanics*
- *Laborers*

Each day the Monitors will determine which employees have reported for work that day. If personnel are not present in conformance with the staffing plan contained in the Final Work Plan, the Monitors will record a separate violation for each person on their Landfill Daily Inspection Form.

### **Facility and Equipment Maintenance and Repair**

Landfill facilities and equipment must be properly maintained and repaired in order to ensure reliable and efficient operations. The GOC has established Contract terms that are intended to guarantee that the Contractor meets minimum requirements for maintaining and repairing facilities and equipment. Provisions address the following:

- Required equipment and back-up.
- Equipment maintenance.
- Facility maintenance and repair.
- Fencing.

### **Required Equipment and Back-up (3.5.8) --**

*The Contractor shall be responsible for procurement, purchase, and maintenance of all landfill operational equipment, including but not limited to, the following:*

- *Graders*
- *Compactors.*
- *Front end loaders.*
- *Pick-up trucks.*
- *Water trucks.*
- *Sweepers.*
- *Communications equipment.*

Each day, the Monitors will determine if the specified equipment is available and capable of operating at the landfill. The Contractor may utilize back-up equipment. The Monitors will record a violation on their Landfill Daily Inspection Form for each piece of equipment that is not available in accordance with the equipment list in the Final Work Plan.

### **Equipment Maintenance Program (3.6.9) --**

*The Contractor shall be responsible for establishing a scheduled equipment maintenance program and conducting routine maintenance on all equipment throughout the duration of the contract.*

The Contractor will make available to the Monitors the equipment maintenance schedules. Each week, the Monitors will inspect the Contractor's equipment maintenance records to determine if equipment is being maintained according to schedules. If the Monitors determine that equipment is not being maintained according to schedule, they will inform the Contractor and request corrective action. The Monitors will record their observations and the Contractor's response on their Landfill Daily Inspection Form.

### **Facility Maintenance and Repair (3.6.13) --**

*The Contractor shall maintain the Landfill Site in a manner that does not negatively impact daily operations, site security, or worker health and safety. The contractor shall maintain the following items in good working condition capable of performing their intended function:*

- *Buildings and other structures including, not limited to: perimeter fencing, gates, paved surfaces, roads, drainage structures and yard piping, leachate collection and storage facilities, utilities, truck scales, and computers.*
- *Mobile equipment including, not limited to: earth moving equipment, graders, front-end loaders, sweepers, dump trucks, water transport trucks, and fire fighting equipment.*

The Contractor is required to maintain all mobile and stationary equipment in accordance with manufacturer instructions. If the Monitors determine that any building, structure, or piece of equipment has not been maintained in accordance with manufacturer instructions, they shall record each instance as a violation on their Landfill Daily Inspection Form. They will also inform the Contractor of their observations and request corrective action.

### **Fencing (4.4.4) --**

The entire Landfill Site shall be secured by fencing at all times. Any holes or breaks in the fence shall be repaired within 24 hours.

Once each week the Monitors will inspect the site fence to determine if there are any holes or breaks. If they find damaged or broken fence, they will inform the Contractor and request corrective action. Each day afterwards and until the Contractor has fixed the violation, they will inspect the damaged/broken part of the fence and record it as a violation on their Landfill Daily Inspection Form.

### **Site Control and Safety**

The RFT contains certain terms to ensure that the Contractor meets the GOC's goals for minimizing worker accidents, public nuisances, adverse environmental impacts, and burden on GOC's emergency services. Contract terms address the following issues:

- Security.
- Safety and communications plan.
- Litter control.



- Fire suppression.
- On-site fuel storage.
- Dust control.

### **Security (3.6.2) --**

Landfill operation shall include 24-hour security at the Landfill gate. The security shall be responsible for prohibiting any unauthorized visitors on the Landfill Site.

Whenever the Engineered Landfill is closed for any reason, the entrance gate shall be closed and locked to prevent vandalism and uncontrolled dumping of waste at the landfill.

The Monitors will perform periodic checks on the landfill security system during hours when the landfill is closed. They will inspect the gate and ensure that the 24-hour security personnel are present. If they determine that security systems do not meet the requirement, they will inform the Contractor and request corrective action. If the Monitors determine that security personnel allowed unauthorized persons access to the landfill, they will record it as a violation on their Landfill Daily Inspection Form.

### **Safety and Communications Plan (3.6.10) --**

*The Contractor shall develop and maintain a Safety and Communications Plan. All facility staff shall receive annual training in health and safety and emergency response procedures. The facility shall be equipped with telephone service to call for emergency medical assistance in the event of a serious worker injury.*

*The facility operator shall stock and provide emergency first aid kits for use in an event of an injury. The Facility Operator shall provide and the workers shall wear personal protective equipment including, but not limited to, steel toe shoes, hard hats, and dust masks. The Contractor also shall provide hard hats and dust masks for site visitors.*

*The facility operator shall conduct a monthly safety inspection of the entire facility and inspect the condition and upkeep of all required personal protective equipment in use and in storage.*

The Contractor will make available to the Monitors all documentation regarding health, safety, and emergency response training provided to personnel. Each month, Monitors will review records to determine if all personnel have received training according to the requirements and if the Contractor has performed a monthly safety inspection. Each day Monitors will observe landfill personnel to determine if they are utilizing required protective equipment. Monitors will inform the Contractor of any deviations from the safety and communications plan. They will record each instance as a violation on their Landfill Daily Inspection Form each day until the Contractor has corrected the problem.

### **Litter Control (3.6.8) --**

The Contractor shall keep the access road, entrance area, office area, and the scalehouse area free from litter at all times. The Contractor shall be responsible for picking up litter inside the Landfill Site as well as any wind blown litter caused by Landfill operations along all access roads. The Site shall have appropriate fencing to capture wind blown paper and plastics.. *On a daily basis, designated landfill facility personnel shall inspect the entire perimeter of the facility and collect all litter within 50 meters outside the landfill boundary. The collected litter shall be placed into a waste collection container and disposed in the landfill.*

Once each week, the Monitors will accompany landfill personnel when they collect litter along the landfill boundary. If the Monitors observe that litter has not been collected and disposed in compliance with the requirement, they will record it as a violation on their Landfill Daily Inspection Form.

### **Fire Suppression System (3.6.11) --**

*The landfill shall be equipped with appropriate fire fighting and fire retardant equipment to suppress any fires on the Site. The Contractor shall inspect all incoming waste to insure that no burning waste is deposited into the Landfill.*

*All buildings located on the landfill site shall be constructed of fire resistant/retardant materials.*

*The Contractor shall equip all buildings, equipment storage areas, and the working face of the landfill with appropriate equipment to extinguish fires at the landfill face utilizing soil or other fire extinguishing material.*

Once each month, the Monitors will inspect the fire suppression system including fire fighting equipment, fire extinguishers, and other materials designated for fire protection. If the Monitors observe any deviation from the facilities and equipment designated in the Final Work Plan, they will inform the Contractor and request corrective action. The Monitors will report non-compliance with requirements as a violation on their Landfill Daily Inspection Form each day until the Contractor corrects the problem.

### **On-Site Fuel Storage (3.6.14) --**

The facility's fuel storage and distribution system shall be constructed and maintained in a manner that meets EU environmental and engineering tank standards.

Once each month, the Monitors will inspect the Contractor's fuel storage and distribution system, as well as any pertinent records maintained by the Contractor, to determine that any required permits are current and valid. If the Monitors determine that the fuel facilities do not comply with the requirement, they will inform the Contractor and request corrective action. Each day afterwards and until the Contractor has fixed the violation, they will inspect the fuel facilities and record a violation on their Landfill Daily Inspection Form.

### **Dust Control (3.6.15) --**

*The Contractor shall incorporate dust control measures to mitigate dust generation during landfill operation. At any time dust is observed at 1m or more above the ground surface, the Contractor shall proceed with dust control measures. Dust control measures shall include paving of access roads, use of water trucks to spray water, and minimizing excavation activities on windy days.*

Throughout the course of their work, the Monitors will observe whether airborne dust is being generated by activities at the Landfill. Typical sources of airborne dust include vehicles and moving equipment, excavation, materials handling, and daily cover operations. If the Monitors observe visible plumes of airborne dust greater than 1 meter above the ground, they will notify the Contractor and request corrective action. The Monitors will record their observations and the Contractors response on their Landfill Daily Inspection Form.

### **Environmental Monitoring**

The Contract includes provisions requiring the Contractor to comply with environmental regulations and monitor the environmental impacts that may be caused by the landfill. Provisions include the following:

- Compliance with regulatory agencies.
- Groundwater monitoring.
- Landfill gas monitoring.

Contractor provisions and suggested monitoring procedures are provided here.

### **Compliance with Regulatory Agencies (3.6.12) --**

*Landfill operation shall be in compliance with EEAA permitting and environmental regulations as well as other health and safety regulations at all times during the duration of the contract. In case of non-compliance the regulatory authority shall be notified within 24 hours.*

Since the Monitors are not Egyptian Environmental Affairs Agency (EEAA) or Ministry employees, they cannot issue citations for violation of regulations. The Monitors will be trained to be familiar with EEAA landfill regulations and other health and safety regulations so that they can identify possible violations at the landfill. If they observe possible violations, the Monitors will inform the Contractor about their observations. The Monitors will also notify the appropriate regulatory authority. Subsequent monitoring of the regulatory compliance determination will be performed by the Compliance Analyst-Fixed Facilities.

### **Groundwater Monitoring (3.8.1) --**

*The Contractor shall be responsible for monitoring of a minimum of three groundwater sampling wells. One well shall be located approximately 500 m up gradient of the Landfill Site and two monitoring wells to be located approximately 100 m down gradient of the Landfill Site. . The Contractor shall prepare, and provide to the GOC, boring logs and well construction details for each of the monitoring wells.*

*Analysis of semi-annual groundwater samples shall be conducted by a GOC certified laboratory and include analysis of the following chemical parameters:*

- *pH*
- *Conductivity*
- *Volatile Organic Compounds VOC's*
- *Hydrocarbons*
- *Lead (Pb), Cadmium (Cd), Mercury (Hg), and Zinc (Zn)*

The exact locations of the monitoring wells and the required chemical analysis of the water samples shall be described in the Final Work Plan and be subject to approval by the GOC.

The Monitors will not be responsible for assessing compliance with this requirement. Results of analytical tests will be sent to the Fixed Facilities Department and reviewed for compliance with the report requirements by the Compliance Analysts-Fixed Facilities. The Compliance Analysts may direct the Monitors to observe collection of groundwater samples.

### **Landfill Gas Monitoring (3.8.2) --**

The Landfill operation shall maintain the landfill gas detection and migration monitoring system. The system shall be used to monitor for the migration of landfill gas into on-site structures as well as for off-site subsurface migration. The Contractor shall monitor on-site structures daily and shall monitor the off-site migration system monthly. All monitoring data shall be reported to the GOC Project Administrator.

All landfill gas monitoring device installation and monitoring sample collection and analytical procedures shall be conducted in accordance the GOC-approved plan for the Engineered Landfill

The Monitors will not be responsible for assessing compliance with this requirement. The Compliance Analysts-Fixed Facilities will review the Landfill Gas Monitoring Plan in order to assess compliance with this requirement.

## **Reporting**

The Contractor is required to submit regular reports to the GOC that provide details on the service provided. The Monitors will not have primary responsibility for assessing Contractor compliance with the reporting requirements. The Contractor will submit reports to the Fixed Facilities Department where they will be reviewed by the Compliance Analysts-Fixed Facilities. The Compliance Analysts may request input from the Monitors to verify information reported by the Contractor compared against the field observations and Landfill Daily Inspection Forms filed by the Monitors.

Monitors should be familiar with the following Contract provision that describes reporting requirements.

**Monthly and Annual Reporting Requirements (3.7.1)** -- *The landfill operator shall submit monthly and annual reports to the GOC. Monthly reports will be due by the 10th day of the month being reported on. Monthly reports must detail the following:*

- *Total tonnage received during that month.*
- *Volume of Landfill space used*
- *Breakdown of waste streams by category (Residential, Commercial, Industrial, and Medical) and monthly tonnage of each.*
- *Injuries or other labor problems during that month.*
- *Total tonnage diverted during the month.*
- *Groundwater and landfill gas monitoring results.*
- *Average in-place waste density.*
- *Percent of total Landfill Airspace used.*
- *Areas of the landfill receiving waste.*
- *Areas of the landfill receiving intermediate or final cover.*
- *Quantities of leachate collected and treated.*
- *Storm events, if any and an assessment of the surface water management system's performance.*
- *An updated list of equipment and vehicles bought or disposed by the Contractor.*
- *Staffing issues or changes.*

- An updated list of supervisory personnel at the Engineered Landfill.
- Description of any non-compliance or violations of law or regulations and their resolution.
- List of Customer and Monitor complaints during the month and their resolution.

Annual Operations Reports must be submitted to the GOC within 30 days from the end of each contract year and will detail the following:

- *Total tonnage received for the previous year.*
- *Breakdown of the 12-month waste streams by category (Residential, Commercial, Industrial, and Medical) and annual tonnage of each.*
- *Volume of landfill used (cubic meters) during the previous year.*
- *Average in place waste density.*
- *Percent of total Landfill Airspace used.*
- Summarized gas and groundwater monitoring results.
- Areas of the landfill receiving waste.
- Areas of the landfill receiving intermediate or final cover.
- A summary of annual groundwater and landfill gas monitoring results, and remedial actions taken, if any.
- Quantities of leachate collected and treated during the year.
- An updated list of equipment and vehicles bought or disposed by the Contractor during the year.
- A summary of any non-compliance or violations of law or regulations during the year and their resolution.
- A summary of Customer complaints during the year and their resolution.
- Proposals for Contract changes that will increase operating efficiency

## **MONITORING MEDICAL WASTE TREATMENT FACILITY OPERATIONS**

The requirements for the medical waste treatment facility are located in the RFT. The facility will be designed, constructed, and operated by the Contractor and will treat all infectious medical waste collected by the Contractor in the Southern Zone.

Fixed Facility Monitors will be on-site at the treatment facility during the Operations Period to monitor Contractor compliance with the service specifications and minimum technical requirements. In order to assist the Monitors to understand their job activities, the Contract terms have been grouped into the following categories:

- Operating schedule.
- Waste receiving.
- Waste treatment.
- Waste transport.
- Waste disposal.
- Personnel.
- Environmental control and emergency response.
- Facility and equipment maintenance.
- Reporting.

Contract terms and suggested monitoring procedures for each category are provided in the separate sections below.

### **Operating Schedule**

The Contract contains provisions that define when the medical waste treatment facility can operate. The GOC established the provisions to provide the Contractor with maximum flexibility while still ensuring that medical waste services integrate with landfill operations. Provisions address the following two items:

- Hours and days of operation.
- Access control and hours of operation.

#### **Hours and Days of Operation (2.6) –**

*Infectious Medical Waste collection, treatment, and disposal services may occur at any hour of the day, providing that the activities can be performed without causing public disturbances, nuisances, or safety hazards deemed unacceptable by the GOC. All Treatment Facility(s) shall be open for operations a minimum of 6 days per week.*

#### **Access Control and Hours of Operation (2.17.2) –**

*Delivery of waste to Treatment Facility(s) may occur at any time of the day or night, subject to approval by the GOC. All facilities shall be secured in a manner that prevents vandalism and unauthorized dumping of waste.*

Monitors will be present at the facility during all operating hours. The only time constraint placed on the Contractor is to allow delivery of treated residue to the landfill only between 0700 and 1800, 6 days per week. This constraint is necessary in order to coincide with the landfill's operating schedule.

Based on daily presence at the facility, Monitors should be able to determine if waste is being shipped at other times. If a Monitor observes waste being shipped outside of the allowable

hours, he/she will notify the Contractor and record it as a violation on the Infectious Medical Waste Facility Daily Inspection Form.

### **Waste Receiving**

Four Contract terms ensure that the Contractor will receive waste in a manner that conforms to the GOC's goals to minimize negative impacts on the public and the environment, and to handle waste in an expeditious manner. Contract terms establish limits on the following:

- Weighing and classification.
- Delivery.
- Storage time.
- Scavenging.

### **Weighing and Classification --**

**Weighing System (2.16.3)** -- *The Contractor shall design, procure, implement, and operate a system for weighing and recording all incoming Infectious Medical Waste materials handled under this Contract.*

**Weighing and Materials Classification System (3.4.1)** -- *The weighing equipment utilized to meet the requirements of this Appendix shall be capable of determining the weight of individual loads of Infectious Medical Wastes and Treated Infectious Medical Waste Residue to an accuracy of 5 kilograms or less.*

*All Treatment Facility(s) shall be equipped with a permanent vehicle weighing system comprised of a scale where all incoming Infectious Medical Waste and outgoing Treated Infectious Medical Waste Residue shall be weighed, and recorded. The vehicle weighing system shall be capable of weighing vehicles up to 30,000 kilograms gross vehicle weight in increments no greater than 5 kilogram.*

The Monitors will ensure that during the Operation Period the system is maintained and operated according manufacturer requirements.

Monitors will spend a portion of each day in the scalehouse observing the Contractor's employees as they weigh and classify incoming and outgoing loads. Monitors will make certain that the Contractor properly weighs and records all incoming and outgoing loads.

Each day, Monitors will inspect the Contractor's records to determine if complete information was recorded regarding loads entering and exiting the facility. Information should include:

- Source of waste/material (for incoming Infectious Medical Waste).
- Destination of waste/material (for outgoing Treated Infectious Medical Waste Residue).
- Date and time.



- Identification number of the vehicle.
- Gross vehicle weight.
- Tare weight.

If the Monitors identify any instance where the Contractor has not complied with the requirements, they shall record it as a violation on their Infectious Medical Waste Treatment Facility Daily Monitoring Form. They will also inform the Contractor of their observations.

### **Disposal (2.9.4)**

*All collected Infectious Medical Wastes shall be delivered to the Infectious Medical Waste Treatment Facility(s) within 8 hours after collection.*

Each day the Monitors will inspect the Contractor's records for incoming loads of Infectious Medical Waste. This work will entail comparing copies of the receipts provided to HCFs (see paragraph 3.2.1) against the scalehouse record for each incoming load. If they determine that the Contractor received any waste that does not comply with this provision, they will inform the Contractor of the incident and record it as a violation on the Infectious Medical Waste Treatment Facility Daily Inspection Form.

### **Storage Time (3.4.2) --**

*All Infectious Medical Wastes shall be treated within 24 hours of being received at the Treatment Facility. All Infectious Medical Wastes stored on site shall be treated by the end of operations each day. The storage of Infectious Medical Waste shall be in a secure manner and location that provides protection from theft, vandalism, inadvertent human or animal exposure, rain, water, and wind. Infectious Medical Wastes shall be managed so as not to provide a breeding place or food for insects or rodents, and not generate noxious odors. There shall be no overnight storage of untreated Infectious Medical Wastes in the receiving area.*

*Should it be necessary to store any Infectious Medical Wastes due to a system malfunction, any Infectious Medical Waste held more than 24 hours shall be stored at a temperature of 5 degrees Celsius or less.*

*All Treated Infectious Medical Waste Residue shall be removed from the Treatment Facility to a GOC Designated Disposal Facility within 24 hours of treatment.*

Each day, Monitors will inspect the receiving area of the Treatment Facility at the beginning and end of their shift. They may also inspect Contractor records to help them determine if any waste has been kept in the receiving area longer than 24 hours. If any of the waste is still present from the previous day when they complete their shift, Monitors will record it as a violation on their Infectious Medical Waste Treatment Facility Daily Inspection Form. They will also notify the Contractor of their observation.

Each day, Monitors will inspect the cold storage area and monitor any waste that is stored there to ensure it is maintained at the required temperature.

Each day, Monitors will inspect the shipping area of the Treatment Facility at the beginning and end of their shift. They may also inspect Contractor records to help them determine if any waste has been kept in the shipping area longer than 24 hours. If any of the waste is still present from the previous day when they complete their shift, Monitors will inform the Contractor and record it as a violation on their Infectious Medical Waste Treatment Facility Daily Inspection Form.

### **Scavenging (2.8)--**

*The Contractor shall forbid all employees and sub-contractors, and shall prevent all others from scavenging any component of the Infectious Medical Waste.*

Monitors will spend a part of each day observing the Contractor's employees as they perform their work. If the Monitors observe any employee recovering any materials for his/her own personal benefit, they shall record each event as a violation on their Infectious Medical Waste Treatment Facility Daily Monitoring Report. They will inform the Contractor and request an immediate halt to the activity.

### **Waste Treatment**

The GOC has established very specific constraints on how the Contractor handles Infectious Medical Waste. This is necessary to ensure that treatment activities do not have an adverse impact on the public or the environment. Contract terms establish limits on the following:

- Operations standards.
- Treatment standards.
- Record keeping and testing standards.

### **Operational Standards (3.5.7)--**

*The Contractor shall guarantee that no more than 3 days worth of untreated Infectious Medical Waste shall be allowed to accumulate either at the HCFs, within the collection system, or at the Treatment Facility(s). In the event of malfunction of the Treatment Facility as the reason for non-treatment, maximum downtime of the Treatment Facility shall not exceed 72 hours. Any Infectious Medical Wastes held for more than 24 hours shall be stored at a temperature of 5 degrees Celsius or less.*

The Monitors will inspect the Contractors records each day to ensure that all incoming waste is treated and shipped out to disposal within three days. They will utilize the Contractor's source-to-disposal tracking system records to determine compliance with this requirement. If the Monitor determines that any Infectious Medical Waste has not been handled in compliance with this provision, he/she will immediately notify the Contractor and record the incident as a violation.

### **Record Keeping and Testing Standards (3.5.8)--**

*The Infectious Medical Waste Treatment Facility shall have the appropriate processes controllable via a computerized system. A print-out shall be available for each and every cycle undertaken and shall include the following data as a minimum:*

- *Date and time*
- *Duration of cycle*
- *Temperature or other treatment standard achieved*
- *Quantity of waste processed*
- *Quantity of Treated Infectious Medical Waste Residue produced*
- *Air emission data*

*The Contractor shall prepare a Infectious Medical Waste Quality Control Plan wherein the appropriate quality control testing/sampling procedures and standards are proposed. The Plan shall describe the remedial actions to be taken if quality control standards are not met. The Quality Control Plan also shall specify the procedures for annual, or more frequent, calibration of instruments and certification by a competent authority.*

*The GOC shall have the authority to approve the Quality Control Plan. The Contractor shall conduct all testing activities as specified in the Quality Control Plan. The quality testing results, as well as remedial activities conducted, if any shall be included in the MORs.*

Each day, the Monitors will inspect the reports printed-out for each cycle of the treatment system to determine if complete information was recorded. Information must all the items listed in the requirement. If the Monitors identify any instance where the Contractor has not complied with the requirements, they shall inform the Contractor and record it as a violation on their Infectious Medical Waste Treatment Facility Daily Monitoring Form.

### **Treatment Standards (3.5.6)--**

*The technology shall be effective to fully reduce, render, or combust the Infectious Waste to a non-infectious residue. The technology shall achieve at least a 6 log<sub>10</sub> reduction or greater inactivation of vegetative bacteria, mycobacteria, lipophilic/hydrophilic viruses, fungi, and parasites. The technology shall achieve at least a 4 log<sub>10</sub> reduction or greater inactivation of Bacillus stearothermophilus endospores or Bacillus subtilis endospores. The actual disinfection process should not be reliant on chemical means.*

*The technology shall be effective for all waste defined by the World Health Organization (WHO) as being potentially infectious, and include sharp containers and bulk body fluids such as blood bags.*

*The Infectious Medical Waste treatment also shall have a fail-safe built-in technology to stop the cycle and alert the operator should disinfection criteria not be achieved at any time.*

*The Contractor shall provide specific laboratory evidence that demonstrates the technology's ability to provide treatment at the above standards, and shall provide the protocols for*

*efficacy testing. The protocols for efficacy testing shall incorporate, as applicable, recognized, standard methodologies. The protocols shall be congruent with the proposed treatment method.*

While the ability of the technology to meet this provision will be evaluated during the Preparation Period, it will be the job of the Monitors to determine if any individual loads are not treated properly. As noted above the Monitors will inspect the daily records regarding treatment. In addition, the Monitors will be present on-site whenever the treatment technology is operating and, thus, will be able determine if the fail-safe warning system is ever activated. When this occurs, the Monitors will observe the Contractor's actions to ensure that waste is re-introduced to the treatment technology and properly treated. If the Monitors observe any breakdown in the process that threatens the ability to meet the treatment standards, they will immediately inform the Contractor and request that remedial actions be undertaken in accordance with the Quality Control Plan. They also shall record each event as a violation on their Infectious Medical Waste Treatment Facility Daily Monitoring Report.

### **Waste Transport**

The RFT contains requirements to ensure that any transport of Infectious Medical Waste or Treated Infectious Medical Waste Residue conforms to the GOC's standards for cleanliness and minimum impact on the public and environment. Transport must comply with the following provision.

#### **Transport of Materials (2.17.6) –**

*The Contractor shall comply with all applicable requirements of this Appendix when transporting Infectious Medical Wastes and Treated Infectious Medical Waste Residue.*

The Monitors will be responsible for assessing Contractor compliance with the following requirements:

- Cargo area of waste collection/transport vehicles (3.3.3).
- Collection vehicle loading (3.1.14).

Other collection and transport vehicle requirements will be assessed by the Medical and Industrial Collection Monitors and the Fixed Facility Monitors stationed at equipment maintenance and storage facilities. If collection and transport vehicles are housed at the Treatment Facility, the Monitors stationed there will follow the procedures describe elsewhere in this Appendix for monitoring equipment maintenance and storage facilities.

#### **Cargo Area of Waste Collection/Transport Vehicles (3.3.3) --**

*The area of the collection body used for the collected Infectious Medical Waste and Treated Infectious Medical Waste Residue shall be watertight and prohibit spillage of any solids or leakage of any liquid waste materials onto the ground or exterior body of the vehicle. The cargo area shall be locked when the vehicle is in motion, and when waste is present in the area, except during loading or unloading of the waste. All discharge openings shall be securely closed during operation of the vehicle.*

Monitors will observe vehicles as they enter and exit the facility. If the Monitors observe spillage or leakage, they will record it as a violation on the Infectious Medical Waste Treatment Facility Daily Inspection Form. They will include the vehicle identification number and time and location of the spillage. They will also immediately inform the Contractor and request spill control measures be undertaken (see paragraph 3.7.5).

### **Collection/Transport Vehicle Loading (3.3.14) --**

*No vehicle used for collection/transport shall be loaded in excess of the manufacturer's gross vehicle weight (GVW) rating or in excess of the maximum weight specified by the Egyptian Roads and Bridges Authority.*

Each day, Monitors will inspect the Contractor's records and determine if any vehicle has exceeded its Gross Vehicle Weight or the maximum road weight limits established by the Egyptian Roads and Bridges Authority. The Monitors will record all violations of this requirement on their Infectious Medical Waste Treatment Facility Daily Inspection Form.

### **Waste Disposal**

### **Treated Infectious Medical Waste Residue Disposal (2.5) --**

*The Contractor shall deliver all Treated Infectious Medical Waste Residue resulting from Treatment to the Designated Disposal Facility(s). For the purpose of preparing its Technical and Financial Proposals, Pre-Qualified Contractors shall assume the Designated Disposal Facility is the 15<sup>th</sup> of May landfill site.*

Each week the Monitors will receive a report from the Monitors stationed at the landfill. The report will list information regarding all loads of Treated Infectious Medical Waste Residue received at the landfill. The Monitors will then crosscheck the report against their own facility's records of outgoing loads. If they determine that a load was not delivered intact to the landfill, the Monitors will record each instance as a violation of this specification.

### **Personnel**

The RFT contains specific terms to ensure that the Contractor's personnel meet the GOC's goals for professional behavior, health, and safety. Contract terms address the following issues:

- Demeanor.
- Uniforms.
- Fees and gratuities.
- Worker health and safety.

### **Demeanor (3.6.4) --**

*The Contractor shall require all employees to conduct themselves in a courteous and helpful manner and refrain from using any loud or profane language.*

The Monitors will observe Contractor employees each day to assess compliance with the requirement. If employees are not complying with the requirement, the Monitors will notify the Contractor of the incident and record it as a violation.

### **Uniforms (3.6.5) --**

*The Contractor shall provide all employees with adequate uniforms, gloves, work boots, reflective vests and other protective clothing as necessary to maintain their appearance and safety. Uniforms and safety gear are subject to approval by the GOC.*

Each day, Monitors will check to see if every employee is in uniform and is equipped with the required protective gear. If any of these items are missing the Monitor will record a violation on the Infectious Medical Waste Treatment Facility Daily Inspection Form, noting the time and location of the observance and the identification number of the employee. They will also notify the Contractor and request corrective actions.

### **Fees and Gratuities (3.6.6) --**

*The Contractor shall not permit any employee, agent or subcontractor to offer special service beyond the scope of this Contract, or to request, solicit, demand, or accept, either directly or indirectly, any compensation or gratuity for services that fall within the scope of this Contract.*

The Monitors will observe Contractor employees each day to assess compliance with the requirement. If they witness improper behavior, they shall record a violation on their Infectious Medical Waste Treatment Facility Daily Inspection Form. They will also notify the Contractor and request corrective actions.

### **Worker Health and Safety (3.7.7) --**

*All Contractor and Sub-contractor personnel shall be provided with a Health and Safety and Emergency Response Manual that provides instructions for protecting worker health and safety and responding to foreseeable emergencies including fire, medical emergency, vehicle accident, and environmental hazards. All Contractor personnel shall receive annual training in health, safety, and emergency response procedures.*

*The facility shall be equipped with a fire alarm directly connected to a rapid response fire fighting squad. The facility shall be equipped with telephone service to call for emergency medical assistance.*

*The facility operator shall provide emergency first aids kits at all workstations. Site workers shall wear personal protective equipment including, and not limited to, steel toe shoes, hard hats, safety glasses and/or facemasks as appropriate, and ventilation masks. Personal protective equipment requirements shall be defined in the Health and Safety and Emergency Response Manual for each worker activity.*

*All employees involved in the collection, treatment, and transport operations shall be receive and maintain all commonly available vaccinations for any disease that may be contained*

*within the Infectious Medical Waste. A vaccination log shall be maintained for all such employees, and the log shall be available for GOC inspection.*

*The facility operator shall conduct a monthly safety inspection of the entire facility and inspect the condition and upkeep of all required personal protective equipment in use and storage.*

The Monitors will undertake a series of activities in order to assess Contractor compliance with the items covered by this requirement. The Monitors will perform the following:

- Periodically inspect Health and Safety and Emergency Response Manuals to ensure that they are complete and readily available to all employees.
- Attend an annual health, safety, and emergency response training course in order to be properly trained in procedures.
- Review the Contractor's employee records to ensure that all employees receive the annual training.
- Periodically inspect first aid kits at all workstations to ensure they are present and contain adequate supplies.
- Review the Contractor's employee records to ensure that all employees receive the required vaccinations.
- Review the results of monthly safety inspection carried out by the Contractor to identify any inadequacies and determine if the Contractor carries out corrective actions.

If the Monitors observe any violations of the requirement, they will immediately inform the Contractor and record it as a violation on their Infectious Medical Waste Treatment Facility Daily Inspection Form.

### **Environmental Control and Emergency Response**

The RFT contains certain terms to ensure that the Contractor meets the GOC's goals for minimizing public nuisances, adverse environmental impacts, and burden on GOC's emergency services. Contract terms address the following issues:

- Environmental standards.
- On-site run-off.
- Wash-down water.
- Facility access control.
- Litter control.
- Fuel leak control.
- Infectious medical waste spillage control.
- Treated infectious medical waste residue spillage control.
- Contaminated water spillage control.

- Spillage control records.
- Fire control and suppression.

Contract provisions and suggested monitoring procedures for each item are provided here.

### **Environmental Standards (3.5.9)--**

*The Infectious Medical Waste Treatment Facility shall meet all local and national air emission requirements, as well as all local and national public health and safety standards.*

The Monitors will not be directly responsible for evaluating compliance with this requirement. It will be handled by the Compliance Analysts-Fixed Facilities who will review Contractor reports and records regarding regulatory compliance. Nevertheless, the Monitors will be trained so that they are familiar with environmental, public health, and safety standards. If they observe any activities or incidents that may be violations of such standards, the Monitors will report it to the Compliance Analysts-Fixed Facilities, who may in turn notify the appropriate regulatory authorities.

### **Off-Site Run-Off (3.7.1)--**

*For all Treatment Facility(s), surface run-off from precipitation falling outside of the Infectious Medical Waste receiving, holding, and treatment areas, as well as the Treated Infectious Medical Waste Residue holding and loading areas, shall be diverted to drainage ditches, swales, or similar such structures designed to handle the 1-hour, 25-year, storm event and directed off site to natural drainage features.*

The Monitors will periodically inspect surface slopes and drainage structures to ensure that they are properly maintained and functioning as intended. After rainstorms, the Monitors will inspect the facility to determine if off-site run-off structures are functioning properly. If off-site run-off is not being diverted, the Monitors will notify the Contractor and request corrective action. The Monitors will record a violation for each day the structures are not repaired.

### **Wash-Down Water (3.7.2)--**

*For all facilities, all wash-down water from any areas where Infectious Medical Wastes or Treated Infectious Medical Waste Residue are handled shall be separated from all other run-off, collected, and contained in a holding tank(s). The holding tank and any water therein are to be disinfected at least once a day. Collected wash-down water may be treated/used in the Infectious Medical Waste treatment system, if technically feasible, and approved by the GOC. Alternately it may be disposed at a wastewater treatment facility subject to GOC approval.*

The Monitors will periodically inspect wash-down water structures to ensure that they are properly maintained and functioning as intended. The Monitors must pay special attention to drainage structures that may become clogged with waste or other material. If wash-down is not being collected, contained, and treated daily, the Monitors will immediately notify the



Contractor and request corrective action. The Monitors will record a violation for each day the structures are not repaired.

### **Facility Access Control (3.7.3)--**

*All facilities shall be surrounded by a combination of fencing (or other structural barrier) and gate(s) that prevent uncontrolled access and vandalism to the facility. All fencing, barriers, and gates shall be maintained in proper working order at all times.*

Once each week the Monitors will inspect the site fences, barriers, and gates to determine if there are any holes or breaks. If they find any damage or breaks, they will inform the Contractor and request corrective action. The Monitors will record a violation for each day the fences, barriers, or gates are not repaired.

### **Litter Control (3.7.4)--**

*On a daily basis at all facilities, the Contractor shall inspect the entire perimeter of the facility and collect all MSW litter which shall be disposed along with all other MSW generated at the facility(s).*

Once each week, the Monitors will accompany Contractor personnel when they collect litter along the Treatment Facility boundary. If the Monitors observe that litter has not been collected and disposed in compliance with the requirement, they will record it as a violation on their Infectious Medical Waste Treatment Facility Daily Inspection Form. They will also inform the Contractor and request immediate corrective actions.

### **Fuel Leak Control (3.7.5.1)--**

*In case of a fuel leak from Infectious Medical Waste delivery or Treated Infectious Medical Waste Residue transport vehicles or from facility equipment, the location of the spill shall be isolated and a commercial absorbent product shall be applied to the spill. This material shall be collected, containerized, and disposed in accordance with applicable environmental regulations.*

By being present on-site during all hours when the Treatment Facility is operating, the Monitors should be aware of instances when fuel is accidentally spilled. The Monitors will observe the Contractor's actions, and if they do not comply with the requirements, the Monitors will immediately inform the Contractor and request remedial action. They will also record each incident as a violation regardless of the Contractor's actions.

### **Infectious Medical Waste Spillage Control (3.7.5.2)--**

*Spilled Infectious Medical Waste shall be sprayed with a chemical disinfectant, collected, and containerized along with Infectious Medical Waste awaiting treatment, and treated in the treatment system. Equipment used to pick up the spilled waste, as well as the area where the spill occurred shall immediately be sprayed with a chemical disinfectant. After disinfection, the area and the equipment shall immediately be washed down with clean water.*

Monitors will carefully observe Treatment Facility operations and should be aware of any times when Infectious Medical Waste is spilled. When a spill occurs, Monitors will observe Contractor response and procedures. They will be especially careful to determine whether spilled Infectious Medical Waste is properly containerized and queued up for treatment. If any of the Contractor's procedures deviate from the Contract provisions, the Monitors will immediately inform the Contractor and request remedial action. They will also record each incident as a violation regardless of the Contractor's actions.

### **Treated Infectious Medical Waste Residue Spillage Control (3.7.5.3)--**

*In the case of spilled Treated Infectious Medical Waste Residue, residue shall be collected and put back into the residue holding area. All equipment used to pick up the spilled Treated Infectious Medical Waste Residue, as well as the area where the spill occurred shall immediately be washed down with clean water.*

The Monitors should be aware of instances when Treated Infectious Medical Waste Residue is accidentally spilled. The Monitors will observe the Contractor's actions, and if they do not comply with the requirements, the Monitors will immediately inform the Contractor and request remedial action. They will also record each incident as a violation regardless of the Contractor's actions.

### **Contaminated Water Spillage Control (3.7.5.4)--**

*In the case of water that has come in contact with Infectious Medical Waste or Treated Infectious Medical Waste Residue, if such a spill does not readily flow back into the drainage structure, a commercial absorbent product shall be applied to the spill. This material shall be collected, containerized, and disposed in accordance with applicable environmental regulations.*

The Treatment Facility design and operations should ensure that any contact water would drain to the holding tank where it will be disinfected (see paragraph 3.7.2). Nevertheless, the Monitors must be diligent in their daily inspection activities to notice any incidents where wash-down water or other contaminated water remains free-standing. If the Contractor has not already initiated remedial actions, the Monitors will immediately notify the Contractor and observe the Contractor's actions. The Monitors will also record each incident as a violation regardless of the Contractor's actions.

### **Spillage Control Records (3.7.5.5)--**

*All spills shall be recorded in the Environmental Control Record Book and the cleanup shall be documented and both spill and cleanup reported in the MOR.*

Monitors will not be responsible for assessing Contractor compliance with this provision. The Compliance Analysts-Fixed Facilities will compare the Contractor's Environmental Control Record Book and MOR against the incidents reported by the Monitors on their Daily Inspection Forms. The Monitors may be called upon to assist in assessing Contractor compliance.

### **Fire Control and Suppression (3.7.6)--**

*All buildings shall be constructed of fire resistant/retardant materials. The Contractor shall install and maintain a fire suppression system in the Infectious Medical Waste Treatment Facility(s). The system shall be designed in accordance with EU standards. The Contractor shall install and maintain fire extinguishers throughout all facilities.*

*The Contractor shall develop a fire control plan. The plan shall instruct workers on fire suppression and evacuation plans, and outline the inspection schedules for the fire suppression system and fire extinguishers. All scheduled inspections, or the failure to conduct a scheduled inspection, shall be reported in the MORs.*

Once each month, the Monitors will inspect the fire suppression system including fire fighting equipment, fire extinguishers, and other materials designated for fire protection. If the Monitors observe any deviation from the facilities and equipment designated in the Final Work Plan, they will inform the Contractor and request corrective action. The Monitors will report each non-compliance with the requirements as a violation.

Monitors will also record any occurrences of fire at the Treatment Facility.

### **Facility and Equipment Maintenance**

### **Facility and Equipment Maintenance (2.18)--**

*The Contractor shall maintain all facilities in a manner that does not negatively impact daily operations, site security, worker health and safety, or public health. The Contractor shall maintain the following items in good working condition capable of performing their intended function:*

- *Buildings and other structures including, and not limited to, perimeter fencing, gates, paved surfaces, unpaved surfaces, drainage structures and yard piping, wash-down water collection and storage facilities, utilities, and truck scales.*
- *Stationary equipment including, and not limited to, waste treatment equipment and waste and residue moving equipment.*
- *Mobile equipment including, and not limited to, skid steers, collection vehicles, transport trucks, etc.*
- *Infectious Medical Waste and Treated Infectious Medical Waste Residue storage and transport containers.*

The Contractor is required to maintain all mobile and stationary equipment in accordance with manufacturer instructions. If the Monitors determine that any building, structure, or piece of equipment has not been maintained in accordance with manufacturer instructions, they shall record each instance as a violation on their Infectious Medical Waste Treatment Facility Daily Inspection Form. They will also inform the Contractor of their observations and request corrective action.

## **Reporting**

The Contractor is required to submit regular reports to the GOC that provide details on the medical waste treatment service. The Monitors will not have primary responsibility for assessing Contractor compliance with the reporting requirements. The Contractor will submit reports to the Fixed Facilities Department where they will be reviewed by the Compliance Analysts-Fixed Facilities. The Compliance Analysts may request input from the Monitors to verify information reported by the Contractor compared against the field observations and Infectious Medical Waste Treatment Facility Daily Inspection Forms filed by the Monitors.

Monitors should be familiar with the following Contract provisions that describe reporting requirements.

### **Monthly Operations Reports (2.20.3) –**

*During the Operations Phase the Contractor shall submit Monthly Operations Reports (MORs) to the GOC Project Administrator that shall include detailed information about the performance of Infectious Medical Waste Management Services. The reports shall be in a form acceptable to the GOC. The MORs shall include, and not be limited to, the following information:*

- *Monthly totals of information maintained in each incoming Infectious Medical Waste log, including quantities collected (by weight).*
- *Monthly totals of information maintained in each outgoing Treated Infectious Medical Waste Residue log, including quantities of Infectious Medical Waste treated, and quantities of Treated Infectious Medical Waste Residue transported and disposed, (by weight).*
- *All air emission, air venting, wash-down water, Treated Infectious Medical Waste Residue, effluent, odor, noise, and any other testing or sampling results.*
- *Actions taken for testing/sampling results that indicate the Treated Infectious Medical Waste Residue does not meet the specified criteria.*
- *Individual description and total number of complaints for each facility.*
- *Resolution of each complaint.*
- *An updated list of equipment and vehicles used for Infectious Medical Waste management services.*
- *An updated list of supervisory personnel for each facility.*
- *Description of any violations of law or regulations and their resolution.*

- *Each MSR shall be submitted to the GOC Project Administrator by the 10<sup>th</sup> day of the next month.*

**Annual Operations Reports (GC A3 2.20.4) –**

*During the Operations Phase the Contractor shall submit Annual Operations Reports (AORs) to the GOC Project Administrator. The AORs shall include, and not be limited to, annual summaries of the results provided in the MORs, as well as proposals for Contract changes that will increase operating efficiency. Each AOR shall be submitted to the GOC Project Administrator within 30 days following the end of the preceding Contract year.*

**Misreporting (2.20.5) –**

*The inclusion of any materially false or misleading statement or representation any report may result in the termination of the Contract or the imposition of penalties.*

## **MONITORING EQUIPMENT MAINTENANCE AND STORAGE FACILITY OPERATIONS**

The Fixed Facility Monitors will be responsible for evaluating Contractor compliance with certain Minimum Technical Requirements for vehicles and equipment and the personnel who operate them.

The Contractor is required to house all collection and transport vehicles and equipment on private property within a building or fenced yard when not in use. This may include vehicles and equipment used for the following services:

- Residential and commercial waste collection (Appendix 2, Article 1).
- Streets and public facility cleaning services (Appendix 2, Article 4).
- Industrial waste collection services (Appendix 2, Article 6).
- Infectious medical waste collection services (Appendix 3).

The Contractor may choose to house vehicles and equipment at a dedicated equipment maintenance and storage facility or at the facilities used to provide processing, transfer, or disposal services. The Contractor will likely use these same locations to maintain and repair vehicles and equipment.

There are similar requirements for vehicles and equipment for each of the services included in the Contract. Accordingly, the Monitors will follow the same procedure regardless of the service to which the vehicle and equipment are assigned, and regardless of the location where they are stored. The Minimum Technical Requirements that will be handled by the Monitors can be grouped into the follow categories:

- Sanitation.
- Maintenance.
- Inspection.
- Operator licenses.
- Marking and identification.
- Licensing and inspection.
- Appearance.
- Ancillary equipment.
- Storage location.

Procedures for each category are presented in the following sub-sections. Contract terms for the various services are listed first and then followed by a description of the suggested monitoring procedures for all services.

### **Sanitation**

#### **Residential and Commercial Waste Collection Vehicle Sanitation (3.1.6) –**

*The interior of the waste carrying area of all vehicles used for the purpose of collecting and transporting any MSW or Bulky Wastes shall be washed with water and a disinfecting/deodorizing cleaning agent according to the schedule submitted as part of the Final Work Plan, and a minimum of twice weekly. All exterior surfaces of the Waste*

*Collection Vehicle chassis and body must be washed with water and a degreasing cleaning agent a minimum of one (1) time per week.*

#### **Street Cleaning Equipment Sanitation (3.1.4) –**

*The interior of the Mechanical Street Sweeper Sweepings storage area shall be washed with water and a disinfecting/deodorizing cleaning agent according to the schedule submitted as part of the Final Work Plan, and a minimum of two (2) times weekly. All exterior surfaces of Street Cleaning Equipment must be washed with water and a degreasing cleaning agent a minimum of one (1) time per week.*

#### **Medical Waste Collection/Transport Vehicle Sanitation (3.3.4) –**

*The interior of the waste carrying area of all vehicles used for the purpose of collecting and transporting Infectious Medical Wastes and Treated Infectious Medical Waste Residue shall be washed with water and a disinfecting/deodorizing-cleaning agent a minimum of once every service day. All exterior surfaces of the waste collection/transport vehicle chassis and body shall be washed with water and disinfecting and degreasing cleaning agents a minimum of once per week. The wash-down water from these cleaning operations is to be handled in accordance with paragraph 3.6.2 of this Appendix.*

Monitors will be provided with copies of the vehicle sanitation schedules submitted by the Contractor in the Final Work Plan. Each week, the Monitor will review the Contractor's records and determine if the records indicate compliance with the schedule for vehicles based at the equipment yard. Each week, the Monitor will randomly select up to five vehicles for each service based at the equipment yard. He/she will observe and record actual washing practices for the selected vehicles and will compare that against the schedule specified in the Final Work Plan. Once each week, the Monitor will record on the Equipment Yard Daily Inspection Form information about each vehicle that was not washed in accordance with the schedule. Information will include the vehicle identification number and service to which it is assigned.

### **Maintenance**

#### **Residential and Commercial Waste Collection Vehicle Maintenance (3.1.7) –**

*The Contractor shall maintain all collection vehicles in a safe and operable condition, to minimize the threat to worker and public health and safety, and to reduce their impact on the surrounding environment. The Contractor shall submit accurate records of repair in the Monthly Operations Report, which shall include, the vehicle identification number, the date/mileage, nature of repair, compliance with preventative maintenance schedules submitted as part of the Contractor's Final Work Plan and the signature of the maintenance supervisor that the repair has been properly performed.*

#### **Street Cleaning Equipment Maintenance (3.1.5) –**

*The Contractor shall maintain all Street Cleaning Equipment in a safe and operable condition to minimize the threat to worker and public health and safety, and to reduce equipment impact on the surrounding environment. All cleaning, greasing and washing shall*

*be done at the equipment storage and maintenance location. The Contractor shall maintain maintenance records for each mobile piece of equipment and submit copies in the Monthly Operations Report, which shall include, the equipment identification number, the date/mileage, nature of repair, and the signature of the maintenance supervisor that the repair has been properly performed.*

### **Infectious Medical Waste Collection/Transport Vehicle Maintenance (3.3.5) –**

*The Contractor shall maintain all collection/transport vehicles in a safe and operable condition, to minimize the threat to worker and public health and safety, and to reduce their impact on the surrounding environment. The Contractor shall submit accurate records of repair in the MOR, which shall include:*

- *The vehicle identification number.*
- *The date/mileage.*
- *Nature of repair.*
- *Compliance with preventative maintenance schedules submitted as part of the Contractor's FWP.*
- *Signature of the maintenance supervisor that the repair has been properly performed.*

Monitors will be provided with a copy of the preventative maintenance schedule submitted by the Contractor in the Final Work Plan. Each month, the Monitor will randomly select up to five vehicles for each service that are based at the equipment yard. He/she will independently record actual preventative maintenance activities and compare that against the schedule specified in the Final Work Plan. Once each month, the Monitor will record on the Equipment Yard Daily Inspection Form each vehicle not maintained in accordance with the schedule. Information to be recorded includes the vehicle identification number and the service to which it is assigned.

Monitors will not be responsible for reviewing the Contractor's preventative maintenance records. This task will be performed by the Compliance Analyst-Fixed Facilities as part of his/her review of the Monthly Operating Report.

## **Inspection**

### **Residential and Commercial Waste Collection Vehicle Inspection (3.1.8) –**

*The Contractor shall inspect each collection vehicle daily to ensure that all equipment is operating properly. Vehicles that do not pass inspection shall be taken out of service until they can pass inspection and operate properly. The Contractor shall maintain accurate Daily Collection Vehicle Inspection Reports that shall be made available to GOC Project Monitors immediately upon request for review and approval of collection vehicle usage.*



### **Street Cleaning Equipment Inspection (GC A2.4 3.1.6) –**

*The Contractor shall inspect each Mechanical Sweeper daily to ensure that all equipment is operating properly. Sweepers that do not pass inspection shall be taken out of service until they can pass inspection and operate properly. The Contractor shall maintain accurate Daily Mechanical Street Sweeper Inspection reports that shall be made available to GOC Project Monitors immediately upon request.*

### **Infectious Medical Waste Collection/Transport Vehicle Inspection (3.3.6) –**

*The Contractor shall inspect each collection/transport vehicle daily to ensure that all equipment is operating properly. Vehicles that do not pass inspection shall be taken out of service until they can pass inspection and operate properly. The Contractor shall maintain accurate Daily Collection/Transport Vehicle Inspection reports that shall be made available to GOC Project Monitors immediately upon request for review and approval of collection vehicle usage.*

The Contractor will be required to provide each vehicle operator with a copy of the Daily Collection Vehicle Inspection Report for his/her vehicle. The Monitor will be stationed at the exit gate of the equipment yard when necessary to inspect every report as the vehicle leaves the yard. Each day, the Monitor will record on the Equipment Yard Daily Inspection Form the identification number of each vehicle that exited the yard without an acceptable inspection report.

### **Operator Licenses**

#### **Residential and Commercial Waste Collection Vehicle Operator Driving Licenses (3.4.8) –**

*Each driver of a collection vehicle shall at all times carry a valid Egyptian commercial driver's license and all other required permits.*

#### **Street Cleaning Equipment Operator Driving Licenses (3.5.10) –**

*Each driver of any motorized Street Cleaning Vehicle shall at all times carry a valid Egyptian commercial driver's license and all other required permits.*

#### **Industrial Waste Collection Vehicle Operator Driving Licenses (3.3.2) –**

*Each driver of a Waste Collection Vehicle shall at all times carry a valid Egyptian commercial driver's license and all other required permits for operating equipment or vehicles.*

#### **Infectious Medical Waste Collection/Transport Vehicle Operator Driving Licenses (GC A3 3.6.7) –**

*Each driver of a collection/transport vehicle shall at all times carry a valid Egyptian commercial driver's license and all other required permits.*

The Monitor will be stationed at the exit gate of the equipment yard when necessary to inspect each vehicle driver's license as he/she leaves the yard. Each day, the Monitor will record on the Equipment Yard Daily Inspection Form the identification number of each driver that exited the yard without a valid license. He/she will also record the service to which the driver is assigned.

### **Marking and Identification**

#### **Residential and Commercial Waste Collection Vehicle Marking and Identification (3.1.10) –**

*All vehicles used in either the supervision or provision of any type of Waste Collection Service shall have highly visible (> 10 cm) lettering on each side of the vehicle body indicating the name and Customer Service telephone number of the Contractor, identification of the GOC as the contracting agent, and vehicle identification numbers (numbered consecutively). The Contractor shall not use a name containing the words "Governorate of Cairo" or other words implying Governorate ownership. All waste carrying vehicles shall also have the carrying capacity, in cubic meters and Gross Vehicle Weight (GVW), of the vehicle identified in numbers at least twelve (12) centimeters in height displayed in the upper front corner of the left and right sides of the body.*

#### **Street Cleaning Equipment Markings And Identification ( 3.1.8) –**

*All vehicles used in both the supervision and provision of all types of Street Cleaning Services shall have highly visible (> 10 cm) lettering on each side of the vehicle body indicating the name and Customer Service telephone number of the Contractor, identification of the GOC as the contracting agent, and vehicle identification numbers (numbered consecutively). The Contractor shall not use a name containing the words "Governorate of Cairo" or other words implying Governorate ownership. All Mechanical Street Sweepers shall also have the carrying capacity (cubic meters and GVW) of the vehicle identified in numbers at least twelve (12) centimeters in height displayed in the upper front corner of the left and right sides of the body.*

#### **Street Cleaning Equipment Safety Markings (3.1.16) –**

*All Street Cleaning equipment used by the Contractor shall have appropriate safety markings including, but not limited to, highway lighting, flashing and warning lights, clearance lights, and warning flags.*

#### **Industrial Waste Collection Vehicle Markings (3.1.5) –**

*Industrial Waste Collection Vehicles shall be marked and identified. All Waste Collection Vehicles and Bins shall have highly visible (greater than 8 cm) lettering on each side of the truck body indicating the name and telephone number of the Contractor, and vehicle identification numbers.*

### **Infectious Medical Waste Collection/Transport Vehicle Markings and Identification (3.3.8) –**

*All vehicles used shall have highly visible (> 8cm) lettering on each side of the vehicle body indicating the name and telephone number of the Contractor and vehicle identification numbers that are a minimum of eight centimeters in height.*

The Monitor will be stationed at the exit gate of the equipment yard when necessary to inspect each vehicle as it leaves the yard. Each day, the Monitor will record on the Equipment Yard Daily Inspection Form the identification number of each vehicle that exited the yard without a marking and identification in compliance with the requirement.

### **Vehicle Licensing**

#### **Residential and Commercial Waste Collection Vehicle Licensing and Inspection (3.1.11) –**

*All collection vehicles operated by the Contractor shall be registered, inspected, insured and comply with all local ordinances and national laws pertaining to motor vehicle ownership and operation.*

#### **Street Cleaning Equipment Licensing and Inspection (3.1.9) –**

*All motorized Street Cleaning vehicles operated by the Contractor shall be registered, inspected, insured and comply with all local ordinances and national laws pertaining to motor vehicle ownership and operation.*

#### **Industrial Waste Collection Vehicle Licensing and Inspection (3.1.6) –**

*All collection vehicles operated by the Contractor shall be registered, inspected, insured and comply with all local ordinances and national laws pertaining to motor vehicle ownership and operation.*

#### **Infection Medical Waste Collection/Transport Vehicle Licensing and Inspection (3.3.9) –**

*All collection/transport vehicles operated by the Contractor shall be registered, inspected, insured and comply with all local ordinances and national laws pertaining to motor vehicle ownership and operation.*

The Monitor will be stationed at the exit gate of the equipment yard when necessary to inspect each vehicle as it leaves the yard. Each day, the Monitor will record on the Equipment Yard Daily Inspection Form the identification number of each vehicle that exited the yard without the required items.

### **Appearance**

#### **Collection Vehicle Appearance (3.1.12) –**

*Collection vehicles shall be repainted at least once every three (3) years.*

### **Street Cleaning Equipment Appearance (GC A2.4 3.1.10) –**

*Sweeping and washing equipment shall be cleaned as specified in paragraph 3.1.4 and shall be repainted at least once every two (2) years.*

### **Industrial Waste Collection Vehicle Appearance (3.1.7) –**

*Collection vehicles shall be repainted at least once every three years.*

### **Infectious Medical Waste Collection/Transport Vehicle Appearance (3.3.10) –**

*Collection/transport vehicles shall be repainted at least once every 3 years.*

The Monitor will review the Contractor's records for repainting. They will also visually inspect vehicles. The Monitor will record on the Equipment Yard Daily Inspection Form the identification number of each vehicle that is not repainted in compliance with the requirement.

### **Ancillary Equipment**

#### **Residential and Commercial Waste Ancillary Equipment (3.1.13) –**

*Each Waste Collection Vehicle shall be equipped with the following:*

- *A fire extinguisher.*
- *A shovel and broom for the collection of any spillage of waste.*
- *An audible backup warning device that is activated when the vehicle is backing up.*
- *Two-way communication with Contractor's collection supervisor and Contractor's dispatch/maintenance office.*
- *Flares, flags and wheel chock blocks for use when breakdowns occur on public streets.*

#### **Street Cleaning Ancillary Equipment (3.1.11) –**

*Each Mechanical Street Sweeper shall be equipped with the following:*

- *A fire extinguisher*
- *A shovel and broom for the collection of any spillage of Street Sweepings*
- *An audible backup warning device that is activated when the vehicle is backing up*
- *Two-way communication with the Street Cleaning supervisor and dispatch office*
- *Flags, flares and wheel chocks for use when breakdowns occur on public streets*

#### **Industrial Waste Ancillary Equipment (3.1.8) –**

*Each waste collection vehicle shall be equipped with:*

- *A fire extinguisher.*
- *A shovel and broom for the collection of any spillage of waste.*
- *An audible backup warning device that is activated when the vehicle is backing up.*

- *Two-way communication with the Field Supervisor and Contractor's dispatch/maintenance office.*
- *Flares, flags and wheel chock blocks for use when breakdowns occur on public streets.*

### **Infectious Medical Waste Ancillary Equipment (3.3.11) –**

*Each waste collection/transport vehicle shall be equipped with:*

- *A fire extinguisher.*
- *A shovel and broom for the collection of any spillage of waste.*
- *Chemical disinfectant to use in the clean up of small localized waste spills.*
- *Absorbent materials to use in the clean up of small localized waste spills.*
- *Personal protective equipment such as gloves, coveralls, and eye protection.*
- *Leak proof containers and packaging materials.*
- *An audible backup warning device that is activated when the vehicle is backing up.*
- *Two-way communication with Contractor's collection supervisor and Contractor's dispatch/maintenance office.*

The Monitor will be stationed at the exit gate of the equipment yard when necessary to inspect each vehicle as it leaves the yard. Each day, the Monitor will record on the Equipment Yard Daily Inspection Form information about each vehicle that exited the yard without ancillary equipment in compliance with the requirement. Information to be recorded will include the vehicle identification number and the service to which the vehicle is assigned.

### **Storage Location**

#### **Residential and Commercial Waste Collection Vehicle Storage Location (3.1.14) –**

*No Contractor vehicle shall be stored on any public street or other public property (with the exception of Existing Facilities that are being turned over to the Contractor) in the GOC. All waste collection vehicles, if kept within the boundaries of the Southern Zone, shall at all times be kept on private property with the proper zoning either within a building or fenced yard when not in use. The Contractor shall provide written notification to the GOC Project Administrator as to the storage location of all Waste Collection Vehicles used in the provision of Waste Collection Services thirty (30) days prior to the first day of service and annually thereafter.*

#### **Street Cleaning Vehicle Storage Location (3.1.12) –**

*No Street Cleaning Service Vehicle shall be stored on any public street or other public property (other than Existing Facilities being handed over to the Contractor) in the GOC. All equipment, if kept within the boundaries of the Southern Zone, shall at all times be kept on GOC approved site with the proper zoning either within a building or fenced yard when not in use. The Contractor shall provide written notification to the GOC Project Administrator as to the storage location of all vehicles used in the provision of Street Cleaning Services thirty (30) days prior to the start of Operations and annually thereafter.*

**Industrial Waste Collection Vehicle Storage Location (3.1.9) –**

*The Contractor shall not park over night or store vehicles on any public street or other public property (other than at Existing Facilities being delivered to the Contractor) in the GOC. vehicles shall at all times be kept on private property within a building or a fenced yard when not in use.*

**Infectious Medical Waste Collection/Transport Vehicle Storage Location (3.3.12) –**

*No Contractor vehicle shall be stored on any public street or other public property in the GOC. All Infectious Medical Waste collection/transport vehicles, if kept within the boundaries of the SZ, shall at all times be kept on private property with the proper zoning either within a building or fenced yard when not in use. The Contractor shall provide written notification to the GOC Project Administrator as to the storage location of all waste collection/transport vehicles used in the provision of Infectious Medical Waste Collection Services 30 days prior to the first day of service and annually thereafter.*

Each day, the Monitor will determine whether equipment and vehicles are being stored at the location indicated by the Contractor. The Monitor will record on the Equipment Yard Daily Inspection Form the identification number of each vehicle that is not stored at the location indicated by the Contractor.

**APPENDIX D**  
**PUBLIC AWARENESS AND COMMUNICATIONS COORDINATOR**  
**PROCEDURES MANUAL**

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# **PUBLIC AWARENESS AND COMMUNICATIONS COORDINATOR**

## **PROCEDURES MANUAL**

### **INTRODUCTION**

The Public Awareness and Communication (PAC) Coordinators will work to implement the GOC's PAC Strategy at the District level. In addition to building public awareness through numerous PAC activities, the PAC Coordinators will be responsible for monitoring certain aspects of the Contractor's Public Information Program.

The PAC Coordinators will work out of the District offices in the Southern Zone. They will spend much of their time out of the office interacting with the public. They will also work outside of the office in order to assess Contractor compliance. Each PAC Coordinator will be assigned a specific territory within their District.

This Appendix presents the relevant Contract terms and describes procedures that the PAC Coordinators will follow in order to evaluate Contractor compliance with the Contract. The Contract terms are cited using the RFT reference in parentheses. Text that is quoted directly from the RFT is in *Italics*.

### **GENERAL DESCRIPTION OF CONTRACTOR SERVICES**

The Contractor and the GOC will undertake a coordinated public information program. The Contractor's efforts will concentrate on providing Customer with detailed information about collection services. The Contractor's role is defined as follows:

#### **Role of the Contractor ( 1.2)**

*The Contractor shall be responsible for:*

- *Development of specific information regarding roles and responsibilities of the Contractor and the Customer groups.*
- *Production of materials for direct delivery to Customers.*
- *Production of materials for broadcast media.*
- *Dissemination of information to each Customer to motivate their proper use of the new waste collection services.*

### **WORK PLANS**

The Contractor must submit a Final Public Information Plan that details the design, implementation, and management of the public information program. The PAC Coordinators

will not be responsible for evaluating whether the Plan conforms to the Contract provisions. However, they should have a detailed working knowledge of the Contractor's Plan.

The Final Plan will be a refinement of the Draft Plan submitted with the Contractor's Bid. The minimum requirements for the Plan are provided below.

### **Promotion Activities (3.1.2)**

*The Contractor's Draft Public Information Plan shall describe the following items:*

- *Strategy for the development of communications goals, objectives, implementation strategies, and evaluation criteria to maximize Customer participation in the services as designed.*
- *Strategy for the public promotion of the Contractor's image, presence, activities and engagement of Customers in the Solid Waste Management Services project.*
- *Specific informational message development.*
- *Means and methods for disseminating the message.*
- *Methods for evaluating success and revising the message.*

### **Public Information Activities (3.1.3)**

*The Contractor's Draft Public Information Plan shall describe the following items:*

- *Strategy for the development of the Public Information campaign.*
- *Development of public information messages and informational materials for each Customer group.*
- *Proposed communication tools to be used in the Public Information program, such as:*
  - *Flyers*
  - *Radio and television*
  - *Brochures*
  - *Posters*
  - *Billboards*
  - *Signs on buses, trams, bus stops, Litter Baskets, etc.*
  - *Leaflets*
- *Methods for evaluating success and revising the message.*

### **News and Media Relations (3.1.4)**

*The Contractor's Draft Public Information Plan shall describe the following items:*

- *Proposed use of media for the dissemination of information to Customers about the Contractor and how to use the new services.*
- *Strategy for sustained delivery of messages to Customers using the media.*
- *Draft plan for communication with the press with updates on project status and new service requirements for individual Customer groups.*

### **Staffing and Management (3.1.5)**

*The Draft Public Information Plan shall describe the staffing and management of this service. The Contractor shall describe the experience of its in-house professionals to implement such a program or shall hire a professional communications firm if it does not have proven in-house capabilities to design and implement the plan.*

*The number and type of personnel involved in the public information services shall be indicated if the service is to be provided in-house. Likewise, the minimum qualifications of the personnel shall indicate prior experience and qualifications in mounting public information campaigns. If this service will be out sourced, the Contractor shall present the qualifications of the proposed public relations firm selected.*

### **Preparation Work Plan (3.2.2)**

*The Final Public Information Plan shall include a Preparation Work Plan (PWP) that describes in detail the Contractor activities and schedules during the Preparation Phase including, but not necessarily limited to, the following:*

- *Recruitment of a professional communications firm or the CV of an in-house person qualified to head and manage the public information campaign.*
- *Staffing plan for Public Information Campaign and Customer Service Office.*
- *Training plan for staff in Customer Service Office.*
- *Organizational structure with name of Customer Service Office Manager.*
- *Strategy for the development of communications goals, objectives, strategies, and evaluation criteria to encourage public participation.*
- *Strategy for the public promotion of the Contractor's image, presence, activities and engagement of Customers in new Services.*
- *Specific message development.*
- *Means and methods for communicating the message.*
- *Methods for evaluating success and revising the message.*

- *Proposed schedule for implementation.*

## **MONITORING INITIAL PUBLIC INFORMATION ACTIVITIES**

During the Preparation Period, the Contractor must provide all Customers with detailed information that explains when service will begin, the collection schedule, types of acceptable waste, and how to prepare waste for collection.

### **Initial Notification ( 3.3.1)**

*No earlier than fifteen (15) days, and no later than seven days before the start of the Operations Period the Contractor shall provide and distribute notices directly to each Customer regarding collection day and time, collection locations, which wastes will be collected, and specific detailed instructions on how and where Customers shall place their waste.*

During the period from 15 days to 7 days before the Operations Period, PAC Coordinators will circulate throughout their assigned territory. They will observe the Contractor's efforts to distribute notices to all Customers. They will talk with the public to assess whether the Contractor has provided notice to all Customers. In areas where they determine that initial notifications have not been provided, the Coordinators will record their observations on their PAC Daily Inspection Form and describe the area or address that did not receive notification.

In the week before the Operations Period, the PAC Coordinators will again circulate throughout their assigned territory to evaluate if the Contractor met the requirement to notify each Customer directly. If they determine that Customers did not receive initial notification, the Coordinators will record on their PAC Daily Inspection Form the addresses that did not receive notification and the type of collection service they are to receive.

### **Waste Pooling Site Service Customers (3.3.2)**

*Service Sectors to be serviced by Waste Pooling Sites shall also be informed through radio and television public service announcements, local community development associations and worship places through posters and flyers one week prior to the launch and simultaneously with the distribution of Bins and establishment of Waste Pooling Sites.*

The Contractor is required to distribute Waste Pooling Site (WPS) bins between 10 and 2 days prior to the Operations Period. Because many of the areas designated for WPS collection service are very low income and informal settlements, it may not be practical for the Contractor to reach each Customer with a written notification. Instead, the Contractor may comply by providing initial notification to WPS Customer through radio, television, and printed posters and flyers.

PAC Coordinators will evaluate compliance with the requirement by regularly walking through WPS service areas in their assigned territory during the period from 10 to 2 days prior to the Operations Period. They will monitor radio and television announcements and look for posters and flyers. They will contact community development associations. They will interview Customers to determine if they have received adequate information regarding the Contractor's collection service. If they determine that Customers did not receive initial

notification, the Coordinators will record on their PAC Daily Inspection Form the addresses that did not receive notifications.

### **Commercial Businesses and Markets (3.3.3)**

*Markets and commercial establishments shall also be informed through radio and television public service announcements, local community development and worship places – one week prior to the start of service using brochures and flyers.*

PAC Coordinators will use the procedures as described above for WPS Customers to evaluate Contractor compliance with this requirement for notifying markets and commercial businesses.

### **Large Commercial Generators (LCG) and Industrial Establishments (3.3.4)**

*The Contractor shall contact all LCGs and Industrial Establishments directly at their place of business no later than thirty (30) days prior to the start of the Operations Period.*

During the month prior to the Operations Period, PAC Coordinators will contact the LCGs and industrial establishments in their assigned territory. They will evaluate Contractor compliance with this requirement by determining whether each location has been contacted by the Contractor. If Customers were not contacted by the Contractor, the Coordinators will record on their PAC Daily Inspection Form the names and addresses of the Customers that did not receive notification.

## **MONITORING FOLLOW-UP PUBLIC INFORMATION ACTIVITIES**

### **Dwelling to Dwelling (DTD) Service Customers (3.4.1)**

*The Contractor's collection crews shall leave follow-up notices on the first day of Operations at each Dwelling Unit that does not set out MSW for collection on the first day of service.*

On the first day of the Operations Period, PAC Coordinators will enter randomly selected buildings in the DTD sectors of their assigned territory. They will conduct this work after the Contractor has performed collection services in the buildings. At Dwelling Units where there is no follow-up notice, the Coordinators will inquire to determine if the Dwelling Unit placed waste out for collection that day. If the Dwelling Units did not place out any waste, the Coordinator will record the address on their PAC Daily Inspection Form. At Dwelling Units where the Contractor did leave a follow-up notice, the Coordinators will inquire to determine if the Customers are aware of the collection service and how to participate in it.

### **Building-to-Building (BTB) Service Customers (3.4.2)**

*The Contractor's collection crews shall leave a follow-up notice on the first day of Operations at each Dwelling Unit in each Building where no MSW is set out for collection on the first day of service.*

On the first day of the Operations Period, PAC Coordinators will enter randomly selected buildings in the BTB sectors of their assigned territory. They will conduct this work after the

Contractor has performed collection services. In buildings where there are no follow-up notices, the Coordinators will inquire to determine if the building placed waste out for collection that day. If the building did not place out any waste, the Coordinator will record the address on their PAC Daily Inspection Form. In buildings where the Contractor did leave follow-up notices, the Coordinators will inquire to determine if the building has roll-out carts and if Customers are aware of the collection service and how to participate in it.

### **Waste Pooling Site (WPS) Service Customers (3.4.3)**

*The Contractor shall deliver follow-up notices to each Dwelling Unit that is located in Service Sectors designated for WPS Service no later than seven (7) days following the Start of the Operations Phase.*

During the week after the Operations Period begins, the Coordinators will survey the WPS areas within their assigned territory to evaluate Contractor compliance with this requirement. Coordinators will interview Customers and determine if they received follow-up notices from the Contractor. If Customers did not receive notices, the Coordinators will record their observations and the address or area on their PAC Daily Inspection Form.

### **Annual Follow-up Requirements (3.4.4)**

*Contractor shall prepare and distribute public information flyers directly to Customers in the Contractor's Service Area a minimum of four (4) times during each year of this Contract. The flyers shall be designed to address specific Customer service issues or problems.. Contents of flyers to be distributed to the public shall include, but not necessarily be limited to the following:*

- *What do Customers pay and what services do they get?*
- *Exact timing and placement of MSW and Bulky Wastes for collection.*
- *The rules for use of Suitable Containers, Rollout Carts and Waste Pooling Site Bins.*
- *Frequency of MSW and Bulky Waste collection.*
- *Description of the collection crew, their uniforms, their duties, Waste Collection Vehicles, etc.*
- *Descriptions of services provided (to justify fees paid) for:*
  - *MSW and Bulky Wastes collection from Dwelling Units, institutions, Large Commercial Generators, markets and shops.*
  - *Providing and servicing Litter Baskets.*
  - *Cleaning streets, Commercial Markets, bridges, tunnels, light poles, traffic and advertising signs, squares, fountains, buses and metro's stations.*
  - *Constructing a new Engineered Landfill.*

- *Upgrading existing transfer stations and composting sites.*
- *Recovering 20 percent of the MSW and Bulky Wastes.*
- *Providing and maintaining Rollout Carts and Bins.*
- *Explaining and clarifying the role and responsibilities of Customers:*
  - *Commitment to placing MSW in Suitable Containers.*
  - *Commitment to the timing of collecting the MSW and Bulky Wastes.*
  - *Keeping the city clean by using the Litter Baskets available in the Commercial Areas.*
  - *Closing the lids of Waste Pooling Site Bins immediately after use.*
  - *Ensuring the protection of Litter Baskets and Waste Pooling Site Bins from damage and vandalism.*

The Coordinators will not be responsible for evaluating if the contents of the flyers comply with this requirement, however, they should carefully read the flyers to be aware of their contents.

PAC Coordinators will evaluate Contractor compliance with the distribution provisions of this requirement. Coordinators will be provided with the Contractor's schedule for distribution of informational flyers during the Operations Period. During the week following flyer distribution, the Coordinators will canvas Customers in their assigned area to determine if they received flyers from the Contractor. If they determine, that Customers did not receive public information flyers, Coordinators will record the location on their PAC Daily Inspection Form.

## **REPORTING**

The Contractor is required to submit regular reports to the GOC that provide details on the Public Information service. The Coordinators will not have primary responsibility for assessing Contractor compliance with the reporting requirements. The Contractor will submit reports to the Public Awareness and Communications Department for review by the Public Awareness Specialist. The Specialist may request input from the Coordinators to verify information reported by the Contractor compared against the field observations and Daily Inspection Forms.

PAC Coordinators should be familiar with the following Contract provisions that describe reporting requirements.

### **Monthly Preparation Reports (MPR) (3.7.2)**

*During the six (6) month Preparation Period, the Contractor shall submit Monthly Preparation Reports (MPR) to the GOC Project Administrator describing the progress made on the Preparation Work Plan during the preceding month. The MPR shall be submitted within the first ten days of each month.*

### **Monthly Operations Report (MOR) (3.7.3)**

*During the Operations Period the Contractor shall submit Monthly Operations Reports to the GOC Contract Administrator summarizing all of the Public Information Services provided to each Customer group. MORs shall be submitted by the 10<sup>th</sup> day of the next month.*

### **Annual Operations Report (AOR) (3.7.4)**

*The Contractor shall submit an Annual Operations Report to the GOC Project Administrator summarizing the performance and results of the Public Information Program. All AORs must be submitted within 30 days of the end of each Contract year. The AORs shall include a summary of the monthly reports.*

### **Misreporting (3.7.5)**

*The inclusion of any materially false or misleading statement or representation of such in any report submitted by the Contractor may result in the imposition of penalties.*



**APPENDIX E**  
**EXAMPLES OF MONITORING FORMS AND REPORTS**

**Cairo Cleaning & Beautification Authority**  
**Contract Monitoring Unit**  
**Zone**

**Form (G)** **Serial No. (----)**  
**Collection of Residential Waste & Street Daily Monitoring Form**

Date:    /    /  
District: .....

Monitor's Name:  
Service Square Area:

Code No.	Timing	Address	Comments*

- \* Record vehicle's number in case of vehicle's violations.
- \* Record worker's name in case of worker's violations.

**Workers Signature**

**Cairo Cleaning & Beautification Authority**  
**Contract Monitoring Unit**  
**Zone**

**Form (G 1)                      Serial No. (----)**  
**Collection of Residential Waste & Street Daily Monitoring Form**

Date:     /     /

District: .....

[illegible]

### Head of the Monitoring Unit

**Cairo Cleaning & Beautification Authority**  
**Contract Monitoring Unit**  
**Zone**

**Form (I)** **Serial No. (----)**  
**Medical & Industrial Daily Monitoring Form**

Date:    /    /  
District: .....

Monitor's Name:  
Service Square Area:

Code No.	Timing	Address	Comments*

- \* Record vehicle's number in case of vehicle's violations.
- \* Record worker's name in case of worker's violations.

**Workers Signature**

**Cairo Cleaning & Beautification Authority**  
**Contract Monitoring Unit**  
**Zone**

**Form (I 1)**
**Serial No. (----)**

## **Medical & Industrial Daily Monitoring Form**

Date:     /     /

District: .....

[illegible]

### Head of the Monitoring Unit

**Cairo Cleaning & Beautification Authority**  
**Contract Monitoring Unit**  
**Zone**

**Form (M)** **Serial No. (----)**  
**Fixed Facilities Daily Monitoring Form**

Date:     /     /  
District: .....

Monitor's Name:  
Service Square Area:

Code No.	Timing	Address	Comments*

- \* Record vehicle's number in case of vehicle's violations.
- \* Record worker's name in case of worker's violations.

**Workers Signature**

**Cairo Cleaning & Beautification Authority**  
**Contract Monitoring Unit**  
**Zone**

**Form (M 1)                                  Serial No. (----)**

**Fixed Facilities Daily Monitoring Form**

Date:     /     /

District: .....

[illegible]

### Head of the Monitoring Unit